

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	C07.0120220412101909_02	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---------------------------------------	-------------------------	--

1. Motherhub Summary

Source TBM/Bin at Pivot	1	Source Geological Domain	2
Approx. Source Tunnel Chainage From	249	Approx. Source Tunnel Chainage To	257
Approx. Rings From	105	Approx. Rings To	109
Foaming Agent	TamSoil 287AC	Water Source	Potable (City West Water)
For BSF Holding Bay No:	C07.01	Start of Filling From (Time / date)	22/03/2022
Tonnes Put in Holding Bay No:	6013.9	Finish of Filling (Time / Date)	23/03/2022
Classified Volume (LCM)	3758.69	Spoil Classification Decision	NPIW Containment
Sampling Ratio (samples per LCM)	1 : 117.46	Approx. Bank Cubic Meters (BCM)	1529.69

2. Agon Spoil Classification Decision

Spoil Categorisation Decision (State Yes or No in each Row)	
NPIW Containment - 2020/476 (SO 9042848)	Yes
NPIW Landfill - 2019/404 (SO 9038429)	Yes
PIW-Category C - 2019/405 (SO 9038560)	No
PIW-Category B - 2019/406 (SO 9038561)	No
PIW-Category A	No

3. Agon Spoil Classification Assessment

3.1 Applicable Samples

Table 3.1 - 1 lists the applicable sample numbers for this spoil. These have been determined from:

- The date / time bay filling was started
- The date / time bay filling was finished
- The ID of the first truck that deposited spoil in the bay and the date / time that it was filled at Pivot
- The ID of the last truck that deposited spoil in the bay and the date / time it was filled at Pivot
- The sample ID that was associated with the first truck – noting that a time window to be associated with each sample is half the time interval between its sampling time and the time of the preceding and the following samples. For example, if samples were collected at 8am, noon and 4 pm, the time window for the noon sample is between 10 am and 2 pm. That is this sample “belongs” to all truck loaded in this time window

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	C07.0120220412101909_02	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---------------------------------------	-------------------------	--

Table 3.1 - Applicable Sample ID's

Table 3.1 - 1 Applicable Sample ID's

Applicable Spoil Sample ID's		
SX_OB_20220322_07_57_SS_Primary_ALS	SX_OB_20220322_20_15_SS_Primary_ALS	SX_OB_20220406_13_46_SS_Primary_EUF
SX_OB_20220322_07_58_SS_Duplicate_ALS	SX_OB_20220323_00_05_SS_Primary_ALS	SX_OB_20220406_13_47_SS_Primary_ALS
SX_OB_20220322_07_59_SS_Triplicate_EUF	SX_OB_20220323_00_15_SS_Primary_EUF	SX_OB_20220406_13_48_SS_Primary_EUF
SX_OB_20220322_08_04_SS_Primary_EUF	SX_OB_20220323_03_59_SS_Primary_EUF	SX_OB_20220406_13_49_SS_Primary_ALS
SX_OB_20220322_11_53_SS_Primary_ALS	SX_OB_20220323_04_04_SS_Primary_ALS	SX_OB_20220406_13_50_SS_Primary_EUF
SX_OB_20220322_11_59_SS_Primary_EUF	SX_OB_20220406_13_39_SS_Primary_EUF	SX_OB_20220406_13_51_SS_Primary_ALS
SX_OB_20220322_15_54_SS_Primary_EUF	SX_OB_20220406_13_41_SS_Duplicate_EUF	SX_OB_20220406_13_52_SS_Primary_ALS
SX_OB_20220322_15_55_SS_Duplicate_EUF	SX_OB_20220406_13_42_SS_Triplicate_ALS	SX_OB_20220406_13_53_SS_Duplicate_ALS
SX_OB_20220322_15_56_SS_Triplicate_ALS	SX_OB_20220406_13_44_SS_Primary_ALS	SX_OB_20220406_13_54_SS_Triplicate_EUF
SX_OB_20220322_16_02_SS_Primary_ALS	SX_OB_20220406_13_45_SS_Primary_EUF	SX_OB_20220406_13_55_SS_Primary_EUF
SX_OB_20220322_20_06_SS_Primary_EUF	SX_OB_20220406_13_46_SS_Primary_ALS	
Total Sample Numbers	32	Ratio Acceptable
Primary Sample Numbers	24	Yes
Classified Volume (LCM)	3758.69 m ³	Ratio used for categorisation of spoil is 156.61 Primary samples to LCM. (See section 4)
Volume: Sample Number Ratio (Samples per LCM)	1 : 117.46	

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	C07.0120220412101909_02	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---------------------------------------	-------------------------	--

3.2 Data Quality Compliance with SAQP

Table 3.2-1 evaluates the compliance of the data quality for this spoil – by reference to the criteria in the SAQP (Yes / No).

Table 3.2 - 1 Evaluation of Quality of Data for this Spoil

DQI	Field Consideration	Laboratory Consideration	Overall Data Quality Acceptability
Precision	Yes	Yes	Yes
Accuracy	Yes	Yes	Yes
Representativeness	Yes	Yes	Yes
Completeness	Yes	Yes	Yes
Comparability	Yes	Yes	Yes

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	C07.0120220412101909_02	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---------------------------------------	--------------------------------	---

3.3 Selection of the Spoil Sample Testing Regime

Table 3.3 - 1 Selection of the Spoil Sample Testing Regime

	(State Yes or No in each Row)
<p>A. Is testing all spoil samples taken required for spoil in this Holding Bay, because prior to this Holding Bay, less than 10 Holding Bays of spoil have been tested from this Domain</p> <p>If the answer is Yes, go to E. If the answer is No, go to B.</p>	Yes
<p>B. If the answer to A is No (i.e., 10 or more Holding Bays of spoil have been tested from this Domain), do trends in the maximum data values from the previous 10 bays indicate that results are trending at <75% of the containment criteria?</p> <p>If the answer is Yes, go to C. If the answer is No, go to D.</p>	NA
<p>C. If the answer to B is Yes, then was testing of spoil for this Holding Bay reduced to two primary samples per bay plus QC samples (Minimum Testing Regime) as allowed by the SAQP (See SAQP Section 6.2.7)?</p>	NA
<p>D. If the answer to B is No, then was the default testing regime implemented for all samples collected for the spoil in this Holding Bay (as required by the SAQP)?</p>	NA
<p>E. Based on the answers to Questions A to D above, was the default testing regime (as defined in the SAQP) applied to the spoil in this Holding Bay?</p>	Yes
<p>F. Based on the answers to Questions A to D above, was the Minimum testing Regime (as defined in the SAQP) applied to the spoil in this Holding Bay?</p>	No

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	C07.0120220412101909_02	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---------------------------------------	-------------------------	--

3.4 Spoil Compliance with SAQP Criteria for Containment Cell

Table 3.4 - 1 Spoil Compliance with SAQP Criteria for Containment Cell

Need for IWRG 621.1 or 655.1 Testing	
A. Is Spoil in this Holding Bay from a Zone of Exception or Anomalous and required testing for IWRG 621.1?	Yes
B. Is IWRG 621.1 testing required for spoil in this Holding Bay, because prior to this Holding Bay, less than 10 Holding Bays of spoil have been tested from this Domain?	Yes
C. Is IWRG 621.1 testing required for spoil in this Holding Bay, because the moving 95% UCL values for the previous 10 consecutive Holding Bays of spoil from this Domain are not below TCO ?	No
D. Is testing pursuant to IWRG 655.1 required for spoil in this Holding Bay, because the spoil comes from Exception Zone 3 (See SAQP Section 5.4)?	No
E. Has spoil testing for IWRG 621.1 Parameters been triggered by results of spoil water tests for previous Holding Bays of spoil from this geological domain?	No
Outcome from IWRG 621.1 testing (if needed)	
F. If Yes to one or more Questions A, B, C or E, (and not NOC< applicable background concentrations) then do test results for IWRG 621.1 (see Table 3.4-2) prohibit NPIW Containment as a spoil Classification Outcome? If no to all of Questions A, B, C and E, then respond NA to this question.	No
Outcome from IWRG 655.1 testing (if needed)	
G. If Yes to Questions D, then do test results for IWRG 655.1 (see Table 3.4-3) permit NPIW Containment as a spoil Classification Outcome? If no to Question D, respond NA to this question	NA
Outcome from PFAS Testing	
H. Do test results for PFAS (see Table 3.4-4 below) permit NPIW Containment as a spoil Classification Outcome?	Yes
<i>If Yes to either or both of Question E or F, then Spoil is Not Suitable for Containment; Go to Section 3.5. Otherwise, it is Suitable for Containment</i>	
Notes:	
<ol style="list-style-type: none"> 1. Criteria taken from EPA Grandfathered Classifications for TBM Spoil (2020/476 (SO 9042848)), and from the EPA approved EMP for Hi Quality's Containment Cell 	

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	C07.0120220412101909_02	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---------------------------------------	--------------------------------	---

Table 3.4 - 2 IWRG 621.1 Parameter Concentration Statistics & Spoil Suitability for Containment

IWRG 621.1 Exceedance Test Results												
Chemical	Unit	LOR	No. of samples	No. of primary samples	Sample: LCM Ratio	No > LOR	Min	Mean	95% UCL on Mean	Max	Limiting Criteria for NPIW Containment	Comment
Arsenic	mg/kg	2	32	24*	156.61	24	18	32	36.44	59	20	NPIW-Containment - considered to be naturally occurring chemical, see comment 1 (Section 4)
Chromium (Hexavalent)	mg/kg	1	32	24*	156.61	3	<1	1.225	N/A	1.6	1	NPIW-Containment - considered to be naturally occurring chemical, see comment 1 (Section 4)
Nickel	mg/kg	5	32	24*	156.61	24	143	201.9	218.5	300	60	NPIW-Containment - considered to be naturally occurring chemical, see comment 1 (Section 4)
Fluoride	mg/kg	100	32	24*	156.61	18	<100	176.43	N/A	490	450	NPIW-Containment - considered to be naturally occurring chemical, see comment 1 (Section 4)

“*” - Ratio used for categorisation of spoil is Primary samples to LCM due to spoil being from a zone of exception. (See Section 4)

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	C07.0120220412101909_02	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---	--------------------------------	---

Table 3.4 – 3 IWRG 655.1 (WASS) Parameter Concentration Statistics & Spoil Suitability for Containment

IWRG 655.1 Test Results											
Chemical	Unit	LOR	No. of primary samples	Sample: LCM Ratio	No > LOR	Min	Mean	95% UCL on Mean	Max	Limiting Criteria for NPIW Containment	Comment
pHF	pH									5	
pHFox	pH									5	
Delta pH										2	
%S	%									0.03%	
Mol H+ /tonne	Mol/tonne									18	

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	C07.0120220412101909_02	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---------------------------------------	-------------------------	--

Table 3.4 - 4 PFAS Parameter Concentrations & Spoil Suitability for Containment

PFAS Test Results											
Chemical	Unit	LOR	No. of Samples	No. of primary samples	No > LOR	Min	Mean	95% UCL on Mean	Max	Upper Limiting Criteria for NPIW Containment	Spoil Category for PFAS
Total PFAS Concentrations											
Total PFOS	ug/kg	5	32	24*	0	N/A	N/A	N/A	<5	N/A	NPIW-Containment
Total PFOA	ug/kg	5	32	24*	0	N/A	N/A	N/A	<5	N/A	NPIW-Containment
Total PFHxS	ug/kg	5	32	24*	0	N/A	N/A	N/A	<5	N/A	NPIW-Containment
ASLP (pH= 5) PFAS Concentrations											
PFOA	ug/L	0.01	32	24*	0	N/A	N/A	N/A	<0.01	56	NPIW-Containment
PFOS+PFHxS	ug/L	0.01	32	24*	0	N/A	N/A	N/A	<0.01	7	NPIW-Containment
ASLP (pH= 7) PFAS Concentrations											
PFOA	ug/L	0.01	32	24*	0	N/A	N/A	N/A	<0.01	56	NPIW-Containment
PFOS+PFHxS	ug/L	0.01	32	24*	0	N/A	N/A	N/A	<0.01	7	NPIW-Containment

“*” - Ratio used for categorisation of spoil is Primary samples to LCM due to spoil being from a zone of exception. (See Section 4)

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	C07.0120220412101909_02	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
-----------------------------------	-------------------------	---

3.5 Waste Classification for Spoil Not Suitable for Containment Cell

This Section 3.5 and the Tables 3.5-1 to 3.5-3 only apply if the spoil is classified in Section 3.4 as not suitable for the Containment Cell. If the spoil is classified in Section 3.4 as not suitable for the Containment Cell, then Tables 3.5-1 and 3.5-2 contain no data and no assessment.

Table 3.5 - 1 below contains the statistics for IWRG 621.1 Parameter concentrations, and Agon's assessment of their implications for the spoil waste category

Table 3.5 - 2 below contains the statistics for IWRG 655.1 Parameter concentrations, and Agon's assessment of their implications for the spoil waste category

Table 3.5 - 3 below contains the statistics for PFAS concentration, and Agon's assessment of their implications for the spoil waste category

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	C07.0120220412101909_02	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---------------------------------------	-------------------------	--

Table 3.5 - 1 IWRG 621.1 Parameter Concentration Statistics & Waste Classifications

IWRG 621.1 Exceedance Test Results													
Chemical	Unit	LOR	No. of primary samples	Sample: LCM Ratio	No > LOR	Min	Mean	95% UCL on Mean	Max	Limiting Criteria for NPIW	Limiting Criteria for Cat C	Limiting Criteria for Cat B	Comment
Arsenic	mg/kg												
Copper	mg/kg												
Chromium (Hexavalent)	mg/kg												
Nickel	mg/kg												
Fluoride	mg/kg												

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	C07.0120220412101909_02	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---------------------------------------	--------------------------------	---

Table 3.5 – 2 IWRG 655.1 (WASS) Parameter Concentration Statistics & Waste Classification

IWRG 655.1 Test Results											
Chemical	Unit	LOR	No. of primary samples	Sample: LCM Ratio	No > LOR	Min	Mean	95% UCL on Mean	Max	Limiting Criteria for NPIW Containment	Comment
pHF	pH									5	
pHFox	pH									5	
Delta pH										2	
%S	%									0.03%	
Mol H+ /tonne	Mol/tonne									18	

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	C07.0120220412101909_02	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---------------------------------------	-------------------------	--

Table 3.5 - 3 PFAS Parameter Concentrations and Waste Classifications

PFAS Test Results													
Chemical	Unit	LOR	No. of primary samples	No > LOR	Min	Mean	95% UCL on Mean	Max	Upper Limiting Criteria for NPIW Containment	Upper Limiting Criteria for NPIW Landfill	Upper Limiting Criteria for PIW Cat C	Upper Limiting Criteria for PIW Cat B	Spoil Category for PFAS
Total PFAS Concentrations													
Total PFOS	ug/kg												
Total PFOA	ug/kg												
Total PFHxS	ug/kg												
ASLP (pH= 5) PFAS Concentrations													
PFOA	ug/L												
PFOS+PFHxS	ug/L												
ASLP (pH= 7) PFAS Concentrations													
PFOA	ug/L												
PFOS+PFHxS	ug/L												

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	C07.0120220412101909_02	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
-----------------------------------	-------------------------	---

4. Comments and Limitations

Comments and Limitations	
1.	<p>Naturally Occurring Chemicals listed in IWRG 621.1 that are within the Background range despite being reported at concentrations that would otherwise categorise the material as PIW:</p> <ol style="list-style-type: none"> 1. Technical discussion around the naturally occurring metal concentrations found in soils beneath the WGTP is detailed in <i>Golder (2017b) – Technical Report B, Appendix E – Environmental characterisation of spoil (natural soil and rock)</i>. The report indicates that elevated metals (including arsenic, nickel, copper, chromium (CrVI), zinc and mercury) were considered to be associated with natural enrichment instead of anthropogenic contamination. <ol style="list-style-type: none"> a. Arsenic – <i>Golder (2017b) – Technical Report B, Appendix E</i> section 6.2 <i>Arsenic enrichment in the residual soil of the upper Older Volcanics (Tvo1)</i> found that while the soil of the upper Older Volcanics sub-unit contains arsenic, the arsenic is not characteristic of the wider sub unit (i.e the rock) or the lower sub-unit (soil or rock). The concentration of arsenic therefore appears to be related to the chemical and biological weather of the unit over time. This is further supported by: <ol style="list-style-type: none"> i. The residual soil of the sub-unit being characterised by iron-oxide staining and containing goethite. Goethite is an iron oxyhydroxide mineral, which can contain elevated concentrations of arsenic. <p>Golder therefore concluded that based on the broad vertical distribution of arsenic and the presence of arsenic throughout the greater project area, arsenic results in Upper Older Volcanics soil are not likely to be associated with anthropogenic contamination.</p> b. Nickel – <i>Golder (2017b) – Technical Report B, Appendix E</i> section 6.3 <i>Nickel enrichment within the upper Older Volcanics</i> found that <ol style="list-style-type: none"> i. Nickel is known to be enriched within olivine and pyroxene basalt minerals, leading to nickel enrichment of soils weathered from basalt (Martini and Chesworth, 2013). ii. The reported mean nickel concentrations within the Older Volcanics were comparable to results reported within soils derived from basalt in Auckland and basalt rock of Finland (ARC, 2001; Koljonen, 1992), Older Volcanics observed in the Melbourne Metro Project (Golder, 1026a) and Newer Volcanics basalt of the Westenra Plains (Birch, 2003). iii. Enriched nickel concentrations corresponded with enriched cobalt (all units) and iron (except tertiary volcanics (Tvo2) soil) indicating that the nickel is likely associated with geochemical enrichment rather than added contamination.

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	C07.0120220412101909_02	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
-----------------------------------	-------------------------	---

iv. Enriched nickel concentrations also corresponded with enriched copper (Two soil and rock) and zinc (all units) indicating that the nickel is likely associated with geochemical enrichment rather than added contamination.

Golder therefore concluded that the nickel is likely associated with geochemical enrichment rather than added contamination.

The Golder study found that based on review of the depth, site history and the geochemical association of elements, the reported elevated concentrations of arsenic and nickel are considered representative of geogenic conditions and are not expected to be associated with contamination.

2. Previous reviews of the presence of hexavalent chromium (CrVI) in soil data outlined on the SAQP (Rev 5) were undertaken by Golders (2017) and later consolidated with data compiled by Mikkonen by AJJV (2019). The AJJV review of the consolidated data set identified:

- Samples reported to contain hexavalent chromium above the IWRG621 Table 2 Fill Material Upper Limit of 1mg/kg, were not collected in areas considered to be where anthropogenic sources of CrVI were present
- The ratio of tests reported above the laboratory LOR of 0.5 mg/kg was 15 out of 84 tests
- The ratio of tests where CrVI was above 1mg/kg was 3 in 84 samples
- The maximum reported concentration was 2.8mg/kg
- The 95%UCLave was 0.439

The AJJV data review was to assess whether the spoil derived from the tunnelling operations would contain chemicals that would result in the spoil being classified as something other than Fill Material. AJJV concluded the CrVI was present due to natural enrichment. Refer extract from the AJJV report below:

In summary, the reported CrVI concentration reported in the Older Volcanics are considered to be naturally occurring / enriched based on the following:

- *No potential CrVI sources have been identified in the vicinity of the sampling locations that reported the CrVI concentrations.*
- *Similar concentrations of CrVI were reported in the Older Volcanics on the MMRP, that were deemed to be naturally occurring.*
- *The 2017 Golder report concluded that enriched arsenic concentrations in the Older Volcanics on WGT*
- *Corresponded with enriched vanadium indicating that the arsenic is likely associated with geochemical enrichment rather than added contamination. The elevated CrVI is also found through this area deemed to be geochemically enriched.*

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	C07.0120220412101909_02	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---------------------------------------	--------------------------------	---

- *There were limited exceedances of CrVI in the groundwater, which suggested no evidence of an anthropogenic source or Potential pathway from the surface*

Given the large volume of ground to be tunnelled, the 95% UCL's in Table E.2 and the likely naturally enriched nature of the reported CrVI, AJJV consider that the CrVI impacts will not alter the spoil classification within Domain 5. AJJV note that the material will undergo ongoing sampling as the TBM spoil is produced – sampling will be outlined within the SAQP. If any contaminated material is encountered beyond the extent of the nominated potentially contaminated domains, this will trigger management of the material in accordance with Tunnel Spoil Disposal Framework.

Agon notes that Table E1: Summary of elevated concentration within Natural materials concludes the presence of hexavalent chromium may “Potentially” classify the spoil as PIW.

Unit	Element Exceeding Criteria	Count	Detects	Min	Max	Mean	Median	Standard Deviation	Count of Exceedance	95% UCL	Fill Material Upper Limit	Victorian Background Soil Database Soil greater than 0.6 m below surface				Findings		Classification as PIW
												Count	Min#	Max	Mean	95% UCL Statistical Assessment	Victorian Soil Database Assessment	
Older Volcanics	Fluoride	84	1	50	600	204	185	109	2	225.1	450	92	<100	790	283	Not Exceeding	Natural Origin	No Affect
	Arsenic	101	84	<4	860	33	7	116	25	84.6	20	994	≤10	1200	18	Exceeding	Natural Origin	No Affect
	Cadmium	103	6	<0.1	3	0.52	0.5	0.41	2	NA	3	-	-	-	-	NA	No Data	No Affect
	Chromium (VI) ¹	84	15	<0.5	2.8	0.927	0.7	0.592	3	0.439	1	-	-	-	-	NA	No Data	Potentially
	Copper	101	98	<5	326	63	55	44	15	82.4	100	799	<25	87	<25	Not Exceeding	No Data	No Affect
	Mercury	101	7	<0.1	1.7	0.077	0.05	0.17	1	NA	1	-	-	-	-	NA	No Data	No Affect
	Nickel	101	99	<2	451	127	115	73	88	140.6	60	830	<25	170	28	Exceeding	Natural Origin	No Affect
	Zinc	101	99	<5	483	84	63	79	6	98.7	200	819	<25	190	<25	Not Exceeding	No Data	No Affect

A review of the Agon data for spoil reported in data set B.05 shows:

- A similar ratio of test results >1mg/kg compared to the overall data set;
- If a ½ LOR is substituted for results reported as <LOR (of 1mg/kg), then like the AJJV 95% UCL, the calculation is <1mg/kg

The results also show that there are no synthetic compounds reported above the laboratory LOR, another indication that anthropogenic contamination is not present

3. Previous reviews of the presence of Fluoride in soil data outlined on the SAQP (Rev 5) were undertaken by AJJV (2019). The AJJV review of the consolidated data set identified:

Samples which reported elevated fluoride concentrations were found to be within the range the ambient background from the parent or similar material in the Victorian Soil Database:

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	C07.0120220412101909_02	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001_01</u>
---	--------------------------------	---

	<p style="margin-left: 40px;">i. Newer Volcanics Group – Maximum 820 mg/kg ii. Older Volcanics – Maximum 600 mg/kg iii. Sub-Basaltic Alluvium – Maximum 240 mg/kg</p> <p style="margin-left: 40px;">In addition, the 95% UCLs calculated for Newer Volcanics Group and Older Volcanics, was 322.7 mg/kg and 225.1 mg/kg respectively, both of these values are below the 450mg/kg upper limit for spoil to be disposed of to the containment cell.</p> <p>A review of the Agon data for spoil reported in this data set shows:</p> <ul style="list-style-type: none"> • A similar ratio of test results > LOR compared to the overall data set; • If a ½ LOR is substituted for results reported as <LOR (of 100mg/kg), then like the AJJV 95% UCL, the calculation is less than the 450mg/kg upper limit for spoil to be disposed of to the containment cell. <p>The results also show that there are no synthetic compounds reported above the laboratory LOR, another indication that anthropogenic contamination is not present.</p>
2.	Test result outcomes can lead to two classification possibilities, however the classification decision follows the preference of the waste management hierarchy.
3.	Spoil is from a “Zone of Exception” therefore sampling ratio of only Primary Samples to LCM has been applied for spoil categorisation as per the SAQP revision 5. Sample to categorised volume ratio in zones of exception is to be as per IWRG702 with 1 primary spoil sample categorising a maximum 250 m3 of spoil.
4.	Loose Cubic metres (LCM) to mass (tonnes) conversion ratio used is 1 LCM:1.6 tonnes
5.	This report has been prepared in accordance with industry recognised standards and procedures current at the time of the work. The report presents the results of the assessment based on the quoted scope of works (unless otherwise agreed in writing) for the specific purposes of the engagement by the Client. No warranties expressed or implied, are offered to any third parties and no liability will be accepted for use of this report by third parties.
6.	All information provided by third parties has been assumed to be correct and complete. Agon does not assume any liability for misrepresentation of information by third parties or for matters not visible, accessible, or present on the subject site.
7.	Opinions and judgements expressed herein are based on Agon’s understanding of current regulatory standards and should not be construed as legal opinions. No responsibility is accepted for use of any part of this report in any other context or for any other purpose or by third parties other than those listed above.
8.	This report should be read in full.

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	C07.0120220412101909_02	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001 01</u>
-----------------------------------	-------------------------	---

5. Attachments

ATTACHMENT A: TABULATED RESULTS

ATTACHMENT B: 95% UCL AVE CALCULATIONS

ATTACHMENT C: LABORATORY CERTIFICATES

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	C07.0120220412101909_02	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001 01</u>
-----------------------------------	-------------------------	---

ATTACHMENT A: TABULATED RESULTS

Tabulated Results Table

	Arsenic
	mg/kg
EQL	2
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold	
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold	
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold	
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold	
EPA Victoria IWRG621 Category B Leached Upper Limits	
EPA Victoria IWRG621 Category B Upper Limits	2,000
EPA Victoria IWRG621 Category C Leached Upper Limits	
EPA Victoria IWRG621 Category C Upper Limits	500
EPA Victoria IWRG621 Fill Upper Limits	20

Location Code	Field ID	Sample Code	Date	Lab Report Number	Lab Name	Sample Type	Parent Sample	
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS	EM2205138001	22/03/2022	EM2205138	ALSE-Melbourne	Normal		26
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS	EM2205138011	22/03/2022	EM2205138	ALSE-Melbourne	Normal		
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS	EM2205138002	22/03/2022	EM2205138	ALSE-Melbourne	Field_D	EM2205138001	22
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS	EM2205138012	22/03/2022	EM2205138	ALSE-Melbourne	Field_D	EM2205138011	
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	M22-Ma46835	22/03/2022	873586	MGT	Interlab_D	EM2205138001	38
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	M22-Ma46844	22/03/2022	873586	MGT	Interlab_D	EM2205138001	
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	M22-Ma46851	22/03/2022	873586	MGT	Interlab_D	EM2205138011	
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	M22-Ma46836	22/03/2022	873586	MGT	Normal		26
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	M22-Ma46845	22/03/2022	873586	MGT	Normal		
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	M22-Ma46852	22/03/2022	873586	MGT	Normal		
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS	EM2205138005	22/03/2022	EM2205138	ALSE-Melbourne	Normal		25
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS	EM2205138013	22/03/2022	EM2205138	ALSE-Melbourne	Normal		
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	M22-Ma46837	22/03/2022	873586	MGT	Normal		25
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	M22-Ma46846	22/03/2022	873586	MGT	Normal		
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	M22-Ma46853	22/03/2022	873586	MGT	Normal		
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	M22-Ma46838	22/03/2022	873586	MGT	Normal		59
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	M22-Ma46847	22/03/2022	873586	MGT	Normal		
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	M22-Ma46854	22/03/2022	873586	MGT	Normal		
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	M22-Ma46839	22/03/2022	873586	MGT	Field_D	M22-Ma46838	39
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	M22-Ma46848	22/03/2022	873586	MGT	Field_D	M22-Ma46847	
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	M22-Ma46855	22/03/2022	873586	MGT	Field_D	M22-Ma46854	
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS	EM2205138006	22/03/2022	EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46838	27
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS	EM2205138014	22/03/2022	EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46854	
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS	EM2205138007	22/03/2022	EM2205138	ALSE-Melbourne	Normal		26
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS	EM2205138015	22/03/2022	EM2205138	ALSE-Melbourne	Normal		
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	M22-Ma46842	22/03/2022	873586	MGT	Normal		41
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	M22-Ma46849	22/03/2022	873586	MGT	Normal		
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	M22-Ma46856	22/03/2022	873586	MGT	Normal		
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS	EM2205138008	22/03/2022	EM2205138	ALSE-Melbourne	Normal		23
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS	EM2205138016	22/03/2022	EM2205138	ALSE-Melbourne	Normal		
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS	EM2205138009	22/03/2022	EM2205138	ALSE-Melbourne	Normal		27

Tabulated Results Table

								Arsenic
								mg/kg
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS	EM2205138017	22/03/2022	EM2205138	ALSE-Melbourne	Normal		
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF	M22-Ma46858	23/03/2022	873586	MGT	Normal		47
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF	M22-Ma47027	23/03/2022	873586	MGT	Normal		
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF	M22-Ma47028	23/03/2022	873586	MGT	Normal		
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF	M22-Ma46843	23/03/2022	873586	MGT	Normal		43
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF	M22-Ma46850	23/03/2022	873586	MGT	Normal		
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF	M22-Ma46857	23/03/2022	873586	MGT	Normal		
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS	EM2205138010	22/03/2022	EM2205138	ALSE-Melbourne	Normal		19
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS	EM2205138018	22/03/2022	EM2205138	ALSE-Melbourne	Normal		
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF	M22-Ap0012318	6/04/2022	877800	MGT	Normal		48
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF	M22-Ap0012328	6/04/2022	877800	MGT	Normal		
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF	M22-Ap0012336	6/04/2022	877800	MGT	Normal		
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF	M22-Ap0012319	6/04/2022	877800	MGT	Field_D	M22-Ap0012318	41
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF	M22-Ap0012329	6/04/2022	877800	MGT	Field_D	M22-Ap0012328	
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF	M22-Ap0012337	6/04/2022	877800	MGT	Field_D	M22-Ap0012336	
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS	EM2206218001	6/04/2022	EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012318	23
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS	EM2206218011	6/04/2022	EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012336	
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS	EM2206218002	6/04/2022	EM2206218	ALSE-Melbourne	Normal		26
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS	EM2206218012	6/04/2022	EM2206218	ALSE-Melbourne	Normal		
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF	M22-Ap0012320	6/04/2022	877800	MGT	Normal		39
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF	M22-Ap0012330	6/04/2022	877800	MGT	Normal		
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF	M22-Ap0012338	6/04/2022	877800	MGT	Normal		
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS	EM2206218003	6/04/2022	EM2206218	ALSE-Melbourne	Normal		22
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS	EM2206218013	6/04/2022	EM2206218	ALSE-Melbourne	Normal		
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF	M22-Ap0012321	6/04/2022	877800	MGT	Normal		50
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF	M22-Ap0012331	6/04/2022	877800	MGT	Normal		
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF	M22-Ap0012339	6/04/2022	877800	MGT	Normal		
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS	EM2206218004	6/04/2022	EM2206218	ALSE-Melbourne	Normal		26
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS	EM2206218014	6/04/2022	EM2206218	ALSE-Melbourne	Normal		
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF	M22-Ap0012322	6/04/2022	877800	MGT	Normal		33
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF	M22-Ap0012332	6/04/2022	877800	MGT	Normal		
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF	M22-Ap0012340	6/04/2022	877800	MGT	Normal		
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS	EM2206218005	6/04/2022	EM2206218	ALSE-Melbourne	Normal		23
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS	EM2206218015	6/04/2022	EM2206218	ALSE-Melbourne	Normal		
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF	M22-Ap0012323	6/04/2022	877800	MGT	Normal		18
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF	M22-Ap0012333	6/04/2022	877800	MGT	Normal		
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF	M22-Ap0012341	6/04/2022	877800	MGT	Normal		
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS	EM2206218006	6/04/2022	EM2206218	ALSE-Melbourne	Normal		20
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS	EM2206218016	6/04/2022	EM2206218	ALSE-Melbourne	Normal		
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS	EM2206218007	6/04/2022	EM2206218	ALSE-Melbourne	Normal		25
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS	EM2206218017	6/04/2022	EM2206218	ALSE-Melbourne	Normal		
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS	EM2206218008	6/04/2022	EM2206218	ALSE-Melbourne	Field_D	EM2206218007	23
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS	EM2206218018	6/04/2022	EM2206218	ALSE-Melbourne	Field_D	EM2206218017	

Tabulated Results Table

								Arsenic
								mg/kg
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	M22-Ap0012324	6/04/2022	877800	MGT	Interlab_D	EM2206218007	33
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	M22-Ap0012334	6/04/2022	877800	MGT	Interlab_D	EM2206218007	
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	M22-Ap0012342	6/04/2022	877800	MGT	Interlab_D	EM2206218017	
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	M22-Ap0012325	6/04/2022	877800	MGT	Normal		31
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	M22-Ap0012335	6/04/2022	877800	MGT	Normal		
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	M22-Ap0012343	6/04/2022	877800	MGT	Normal		

	Metals										
	Cadmium	Copper	Chromium (III+VI)	Chromium (hexavalent)	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Tin
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.4	5	5	1	5	0.1	5	5	2	2	10
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold											
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold											
EPA Victoria IWRG621 Category B Leached Upper Limits											
EPA Victoria IWRG621 Category B Upper Limits	400	20,000		2,000	6,000	300	4,000	12,000	200	720	
EPA Victoria IWRG621 Category C Leached Upper Limits											
EPA Victoria IWRG621 Category C Upper Limits	100	5,000		500	1,500	75	1,000	3,000	50	180	500
EPA Victoria IWRG621 Fill Upper Limits	3	100		1	300	1	40	60	10	10	50

Location Code	Field ID	Cadmium	Copper	Chromium (III+VI)	Chromium (hexavalent)	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Tin
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS	<1	49	81	<1.0	<5	<0.1	<5	145	<5	<2	<10
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS											
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS	<1	47	81	<1.0	<5	<0.1	<5	146	<5	<2	<10
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS											
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	<0.4	67	130	<1	5.4	<0.1	<5	200	<2	<2	<10
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF											
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF											
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	<0.4	60	120	1	<5	<0.1	<5	190	<2	<2	<10
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF											
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF											
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS	<1	49	88	<1.0	<5	<0.1	<5	143	<5	<2	<10
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS											
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	<0.4	59	100	<1	<5	<0.1	<5	190	<2	<2	<10
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF											
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	<0.4	98	190	<1	7.1	<0.1	<5	250	<2	<2	<10
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	<0.4	86	190	<1	7.2	<0.1	<5	270	<2	<2	<10
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF											
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF											
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS	<1	56	93	<1.0	<5	<0.1	<5	170	<5	<2	<10
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS											
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS	<1	49	91	<1.0	<5	<0.1	<5	150	<5	<2	<10
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS											
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	<0.4	73	170	<1	6.7	<0.1	<5	230	<2	<2	<10
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF											
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF											
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS	<1	49	84	<1.0	<5	<0.1	<5	145	<5	<2	<10
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS											
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS	<1	54	108	<1.0	<5	<0.1	<5	167	<5	<2	<10

		Metals										
		Cadmium	Copper	Chromium (III+VI)	Chromium (hexavalent)	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Tin
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF	<0.4	99	190	<1	8.1	<0.1	<5	300	<2	<2	<10
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF	<0.4	80	170	<1	5.7	<0.1	<5	250	<2	<2	<10
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS	<1	50	104	<1.0	<5	<0.1	<5	154	<5	<2	<10
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF	<0.4	96	180	<1	6.1	<0.1	<5	280	<2	<2	<10
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF	<0.4	85	160	<1	5.2	<0.1	<5	280	<2	<2	<10
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS	<1	53	92	<1.0	<5	<0.1	<5	170	<5	<2	<10
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS											
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS	<1	56	101	<1.0	<5	<0.1	<5	166	<5	<2	<10
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF	<0.4	72	140	<1	5	<0.1	<5	220	<2	<2	<10
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS	<1	50	102	<1.0	<5	<0.1	<5	155	<5	<2	<10
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF	<0.4	68	130	<1	<5	<0.1	<5	240	<2	<2	<10
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS	<1	54	95	<1.0	<5	<0.1	<5	168	<5	<2	<10
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF	<0.4	77	160	<1	<5	<0.1	<5	250	<2	<2	<10
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS	<1	62	88	1.3	<5	<0.1	<5	190	<5	<2	<10
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF	<0.4	55	140	<1	<5	<0.1	<5	150	<2	<2	<10
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS	<1	52	102	1	<5	<0.1	<5	168	<5	<2	<10
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS	<1	56	104	1.6	<5	<0.1	<5	205	<5	<2	<10
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS	<1	48	94	1.4	<5	<0.1	<5	164	<5	<2	<10
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS											

		Metals										
		Cadmium	Copper	Chromium (III+VI)	Chromium (hexavalent)	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Tin
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	<0.4	79	170	<1	<5	<0.1	<5	240	<2	<2	<10
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	<0.4	64	120	<1	<5	<0.1	<5	230	<2	<2	<10
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											

	Zinc	PAHs (Vic EPA List)	Benzo(b+j+k)fluoranthene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene TEQ calc (Zero)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Half)	Benzo(a) pyrene
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold											
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold											
EPA Victoria IWRG621 Category B Leached Upper Limits											
EPA Victoria IWRG621 Category B Upper Limits	140,000	400									20
EPA Victoria IWRG621 Category C Leached Upper Limits											
EPA Victoria IWRG621 Category C Upper Limits	35,000	100									5
EPA Victoria IWRG621 Fill Upper Limits	200	20									1

Location Code	Field ID	Zinc	PAHs (Vic EPA List)	Benzo(b+j+k)fluoranthene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene TEQ calc (Zero)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Half)	Benzo(a) pyrene
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS	78	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS											
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS	83	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS											
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	130			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF											
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF											
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	110			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF											
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF											
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS	77	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS											
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	110			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF											
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	160			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	170			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF											
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF											
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS	100	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS											
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS	82	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS											
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	160			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF											
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF											
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS	76	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS											
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS	100	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5

		Zinc	PAHs (Vic EPA List)	Benzo(b+j+k)fluoranthene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene TEQ calc (Zero)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Half)	Benzo(a) pyrene
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF	180			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF	170			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS	85	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF	180			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF	190			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS	98	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS											
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS	93	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF	140			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS	88	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF	140			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS	96	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF	150			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS	97	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF	87			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS	89	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS	100	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS	78	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS											

		Zinc	PAHs (Vic EPA List)	Benzo(b+j+k)fluoranthene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene TEQ calc (Zero)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Half)	Benzo(a) pyrene
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	140			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	120			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											

	PAH										
	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold											
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold											
EPA Victoria IWRG621 Category B Leached Upper Limits											
EPA Victoria IWRG621 Category B Upper Limits											
EPA Victoria IWRG621 Category C Leached Upper Limits											
EPA Victoria IWRG621 Category C Upper Limits											
EPA Victoria IWRG621 Fill Upper Limits											

Location Code	Field ID	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS											
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS											
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF											
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF											
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF											
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF											
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS											
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF											
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF											
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF											
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS											
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS											
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF											
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF											
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS											
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

		PAH										
		Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS											
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS											

		PAH										
		Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											

	BTEX						TRH				
	PAHs (Sum of total)	Benzene	Ethylbenzene	Toluene	Xylene (o)	Xylene (m & p)	Xylene Total	C6-C10	C6-C10 (F1 minus BTEX)	C10-C16	C10-C16 (F2 minus Naphthalene)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.1	0.1	0.1	0.1	0.2	0.3	20	20	50	50
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold											
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold											
EPA Victoria IWRG621 Category B Leached Upper Limits											
EPA Victoria IWRG621 Category B Upper Limits	400	16									
EPA Victoria IWRG621 Category C Leached Upper Limits											
EPA Victoria IWRG621 Category C Upper Limits	100	4									
EPA Victoria IWRG621 Fill Upper Limits	20	1									

Location Code	Field ID											
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS											
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS											
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF											
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF											
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF											
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF											
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS											
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	64	64	<50	<50
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF											
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF											
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF											
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS											
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS											
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF											
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF											
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS											
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50

		BTEX						TRH				
		PAHs (Sum of total)	Benzene	Ethylbenzene	Toluene	Xylene (o)	Xylene (m & p)	Xylene Total	C6-C10	C6-C10 (F1 minus BTEX)	C10-C16	C10-C16 (F2 minus Naphthalene)
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS											
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS											

		BTEX						TRH				
		PAHs (Sum of total)	Benzene	Ethylbenzene	Toluene	Xylene (o)	Xylene (m & p)	Xylene Total	C6-C10	C6-C10 (F1 minus BTEX)	C10-C16	C10-C16 (F2 minus Naphthalene)
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											

	TPH										
	C16-C34	C34-C40	C10-C40 (Sum of total)	C6-C9	C10-C14	C15-C28	C29-C36	+C10-C36 (Sum of total)	Aldrin	Dieldrin	Aldrin + Dieldrin
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	100	100	50	20	20	50	50	50	0.05	0.05	0.05
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold											
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold											
EPA Victoria IWRG621 Category B Leached Upper Limits											
EPA Victoria IWRG621 Category B Upper Limits				2,600				40,000			4.8
EPA Victoria IWRG621 Category C Leached Upper Limits											
EPA Victoria IWRG621 Category C Upper Limits				650				10,000			1.2
EPA Victoria IWRG621 Fill Upper Limits				100				1,000			

Location Code	Field ID	C16-C34	C34-C40	C10-C40 (Sum of total)	C6-C9	C10-C14	C15-C28	C29-C36	+C10-C36 (Sum of total)	Aldrin	Dieldrin	Aldrin + Dieldrin
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS											
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS											
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05	<0.05
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF											
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF											
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05	<0.05
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF											
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF											
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS											
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	<100	<100	<100	22	<20	<50	<50	<50	<0.05	<0.05	<0.05
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF											
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05	<0.05
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05	<0.05
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF											
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF											
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS											
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS											
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	<100	<100	<100	<20	27	<50	<50	<50	<0.05	<0.05	<0.05
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF											
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF											
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS											
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30

		TPH							Aldrin	Dieldrin	Aldrin + Dieldrin	
		C16-C34	C34-C40	C10-C40 (Sum of total)	C6-C9	C10-C14	C15-C28	C29-C36				+C10-C36 (Sum of total)
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF	<100	<100	<100	<20	22	<50	<50	<50	<0.05	<0.05	<0.05
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF	<100	<100	<100	<20	23	<50	<50	<50	<0.05	<0.05	<0.05
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05	<0.05
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05	<0.05
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS											
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05	<0.05
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF	<100	<100	<100	<20	36	<50	<50	<50	<0.05	<0.05	<0.05
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05	<0.05
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF	<100	<100	<100	<20	38	<50	<50	<50	<0.05	<0.05	<0.05
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05	<0.30
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS											

		TPH										
		C16-C34	C34-C40	C10-C40 (Sum of total)	C6-C9	C10-C14	C15-C28	C29-C36	+ C10-C36 (Sum of total)	Aldrin	Dieldrin	Aldrin + Dieldrin
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05	<0.05
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05	<0.05
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											

	Organochlorine Pesti										
	DDD	DDT	4,4-DDE	DDT+DDE+DDD	Endosulfan I	Endosulfan II	Endrin	Endrin ketone	Endrin aldehyde	Endosulfan sulphate	Chlordane
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold											
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold											
EPA Victoria IWRG621 Category B Leached Upper Limits											
EPA Victoria IWRG621 Category B Upper Limits				50							16
EPA Victoria IWRG621 Category C Leached Upper Limits											
EPA Victoria IWRG621 Category C Upper Limits				50							4
EPA Victoria IWRG621 Fill Upper Limits											

Location Code	Field ID	DDD	DDT	4,4-DDE	DDT+DDE+DDD	Endosulfan I	Endosulfan II	Endrin	Endrin ketone	Endrin aldehyde	Endosulfan sulphate	Chlordane
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS											
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS											
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF											
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF											
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF											
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF											
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS											
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF											
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF											
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF											
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS											
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS											
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF											
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF											
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS											
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10

		Organochlorine Pesti										
		DDD	DDT	4,4-DDE	DDT+DDE+DDD	Endosulfan I	Endosulfan II	Endrin	Endrin ketone	Endrin aldehyde	Endosulfan sulphate	Chlordane
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS											
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS											

		Organochlorine Pesti										
		DDD	DDT	4,4-DDE	DDT+DDE+DDD	Endosulfan I	Endosulfan II	Endrin	Endrin ketone	Endrin aldehyde	Endosulfan sulphate	Chlordane
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											

cides

	Chlordane (cis)	Chlordane (trans)	Hexachlorobenzene	Heptachlor	Heptachlor epoxide	a-BHC	b-BHC	d-BHC	g-BHC (Lindane)	Methoxychlor	Toxaphene
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.03	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.5
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold											
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold											
EPA Victoria IWRG621 Category B Leached Upper Limits											
EPA Victoria IWRG621 Category B Upper Limits				4.8							
EPA Victoria IWRG621 Category C Leached Upper Limits											
EPA Victoria IWRG621 Category C Upper Limits				1.2							
EPA Victoria IWRG621 Fill Upper Limits											

Location Code	Field ID											
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS											
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS											
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF											
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF											
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF											
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF											
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS											
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF											
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF											
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF											
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS											
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS											
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF											
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF											
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS											
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	

cides

		Chlordane (cis)	Chlordane (trans)	Hexachlorobenzene	Heptachlor	Heptachlor epoxide	a-BHC	b-BHC	d-BHC	g-BHC (Lindane)	Methoxychlor	Toxaphene
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS											
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS											

cides

		Chlordane (cis)	Chlordane (trans)	Hexachlorobenzene	Heptachlor	Heptachlor epoxide	α-BHC	β-BHC	δ-BHC	γ-BHC (Lindane)	Methoxychlor	Toxaphene
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											

	Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	2-Chlorophenol	2,4-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol	4-chloro-3-methylphenol	Pentachlorophenol	2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4,6-Dinitro-2-methylphenol
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.1	0.03	0.5	0.5	1	1	0.5	1	1	0.05	5
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold											
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold											
EPA Victoria IWRG621 Category B Leached Upper Limits											
EPA Victoria IWRG621 Category B Upper Limits		50									
EPA Victoria IWRG621 Category C Leached Upper Limits											
EPA Victoria IWRG621 Category C Upper Limits		10									
EPA Victoria IWRG621 Fill Upper Limits	1										

Location Code	Field ID											
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS	<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS											
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS	<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS											
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF											
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF											
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF											
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF											
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS	<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS											
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF											
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF											
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF											
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS	<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS											
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS	<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS											
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF											
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF											
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS	<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS											
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS	<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5

		Organochlorine pesticides EPAVc	Other organochlorine pesticides EPAVc	2-Chlorophenol	2,4-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol	4-chloro-3-methylphenol	Pentachlorophenol	2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4,6-Dinitro-2-methylphenol
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS	<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS	<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS											
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS	<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS	<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS	<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS	<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS	<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS	<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS	<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS											

		Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	2-Chlorophenol	2,4-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol	4-chloro-3-methylphenol	Pentachlorophenol	2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4,6-Dinitro-2-methylphenol
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											

	Phenols										
	Tetrachlorophenols	2,3,5,6-Tetrachlorophenol	Cresol Total	4,6-Dinitro-o-cyclohexyl phenol	Phenols (halogenated) EPAVIC	Phenols (non-halogenated) EPAVIC	2,4-Dimethylphenol	2-Methylphenol	2-Nitrophenol	2,4-Dinitrophenol	3&4-Methylphenol (m&p-cresol)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	10	0.03	0.5	20	1	20	0.5	0.2	1	5	0.4
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold											
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold											
EPA Victoria IWRG621 Category B Leached Upper Limits											
EPA Victoria IWRG621 Category B Upper Limits					320	2,200					
EPA Victoria IWRG621 Category C Leached Upper Limits											
EPA Victoria IWRG621 Category C Upper Limits					10	560					
EPA Victoria IWRG621 Fill Upper Limits					1	60					

Location Code	Field ID											
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS		<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS											
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS		<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS											
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF											
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF											
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF											
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF											
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS		<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS											
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF											
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF											
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF											
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS		<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS											
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS		<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS											
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF											
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF											
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS		<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS											
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS		<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1

		Phenols										
		Tetrachlorophenols	2,3,5,6-Tetrachlorophenol	Cresol Total	4,6-Dinitro-o-cyclohexyl phenol	Phenols (halogenated) EPAVIC	Phenols (non-halogenated) EPAVIC	2,4-Dimethylphenol	2-Methylphenol	2-Nitrophenol	2,4-Dinitrophenol	3&4-Methylphenol (m&p-cresol)
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS		<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS		<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS											
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS		<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS		<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS		<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS		<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS		<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS		<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS		<0.03		<20	<1.00	<20	<1	<1	<1	<5	<1
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS											

		Phenols										
		Tetrachlorophenols mg/kg	2,3,5,6-Tetrachlorophenol mg/kg	Cresol Total mg/kg	4,6-Dinitro-o-cyclohexyl phenol mg/kg	Phenols (halogenated) EPAVIC mg/kg	Phenols (non-halogenated) EPAVIC mg/kg	2,4-Dimethylphenol mg/kg	2-Methylphenol mg/kg	2-Nitrophenol mg/kg	2,4-Dinitrophenol mg/kg	3&4-Methylphenol (m&p- cresol) mg/kg
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	<10		<0.5	<20			<0.5	<0.2	<1	<5	<0.4
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											

	4-Nitrophenol	Dinoseb	Phenol	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)		8:2 Fluorotelomer sulfonic acid (8:2 FTS)		6:2 Fluorotelomer sulfonic acid (6:2 FTS)	
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
EQL	5	20	0.5	1	20	0.00001	0.005	0.00001	0.005	0.00005	0.01
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold											
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold											
EPA Victoria IWRG621 Category B Leached Upper Limits											
EPA Victoria IWRG621 Category B Upper Limits											
EPA Victoria IWRG621 Category C Leached Upper Limits											
EPA Victoria IWRG621 Category C Upper Limits											
EPA Victoria IWRG621 Fill Upper Limits											

Location Code	Field ID	4-Nitrophenol	Dinoseb	Phenol	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)	10:2 Fluorotelomer sulfonic acid (10:2 FTS) mg/L	10:2 Fluorotelomer sulfonic acid (10:2 FTS) mg/kg	8:2 Fluorotelomer sulfonic acid (8:2 FTS) mg/L	8:2 Fluorotelomer sulfonic acid (8:2 FTS) mg/kg	6:2 Fluorotelomer sulfonic acid (6:2 FTS) mg/L	6:2 Fluorotelomer sulfonic acid (6:2 FTS) mg/kg
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS						<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS						<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	<5	<20	<0.5	<1	<20	<0.00001	<0.005	<0.00001	<0.005	<0.00005	<0.01
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	<5	<20	<0.5	<1	<20	<0.00001	<0.005	<0.00001	<0.005	<0.00005	<0.01
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS						<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	<5	<20	<0.5	<1	<20	<0.00001	<0.005	<0.00001	<0.005	<0.00005	<0.01
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	<5	<20	<0.5	<1	<20	<0.00001	<0.005	<0.00001	<0.005	<0.00005	<0.01
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	<5	<20	<0.5	<1	<20	<0.00001	<0.005	<0.00001	<0.005	<0.00005	<0.01
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS						<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS						<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS						<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	<5	<20	<0.5	<1	<20	<0.00001	<0.005	<0.00001	<0.005	<0.00005	<0.01
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS						<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100

		4-Nitrophenol	Dinoseb	Phenol	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)		8:2 Fluorotelomer sulfonic acid (8:2 FTS)		6:2 Fluorotelomer sulfonic acid (6:2 FTS)	
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS						<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS						<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS						<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS						<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS						<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS						<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS						<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS						<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS						<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS						<0.00005		<0.00005		<0.00005	

		4-Nitrophenol	Dinoseb	Phenol	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)		8:2 Fluorotelomer sulfonic acid (8:2 FTS)		6:2 Fluorotelomer sulfonic acid (6:2 FTS)	
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF						<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF						<0.00001		<0.00001		<0.00005	

	4:2 Fluorotelomer sulfonic acid (4:2 FTS)		N-Ethyl perfluorooctane sulfonamide (NETFOSA)		N-ethyl-perfluorooctanesulfonamid oacetic acid (NETFOsAA)		N-ethylperfluorooctanesulfon amidoethanol (NETFOSE)		N-Methyl perfluorooctane sulfonamide (NMeFOsA)		N-methylperfluorooctane sulfonamide (NMeFOsA)
	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
EQL	0.00001	0.005	0.00005	0.005	0.00005	0.01	0.00005	0.005	0.00005	0.005	0.00005
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold											
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold											
EPA Victoria IWRG621 Category B Leached Upper Limits											
EPA Victoria IWRG621 Category B Upper Limits											
EPA Victoria IWRG621 Category C Leached Upper Limits											
EPA Victoria IWRG621 Category C Upper Limits											
EPA Victoria IWRG621 Fill Upper Limits											

Location Code	Field ID	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF		<0.005		<0.005		<0.01		<0.005		<0.005	
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF		<0.005		<0.005		<0.01		<0.005		<0.005	
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF		<0.005		<0.005		<0.01		<0.005		<0.005	
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF		<0.005		<0.005		<0.01		<0.005		<0.005	
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF		<0.005		<0.005		<0.01		<0.005		<0.005	
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF		<0.005		<0.005		<0.01		<0.005		<0.005	
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005

		4:2 Fluorotelomer sulfonic acid (4:2 FTS)		N-Ethyl perfluorooctane sulfonamide (NEFOSA)		N-ethyl-perfluorooctanesulfonamid oacetic acid (NEFOSAA)		N-ethylperfluorooctanesulfon amidoethanol (NEFOSE)		N-Methyl perfluorooctane sulfonamide (NMeFOSA)		N-methylperfluorooctane sulfonamide
		mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF		<0.005		<0.005		<0.01		<0.005		<0.005	
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF		<0.005		<0.005		<0.01		<0.005		<0.005	
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005

	Perfluorooctanoic acid (PFOS)	N-Methylperfluorooctanesulfonamideethanol (N-MeFOSE)	Perfluorobutanoic acid (PFBA)	Perfluorobutane sulfonic acid (PFBS)		Perfluorodecanoic acid (PFDA)		Perfluorododecanoic acid (PFDoDA)			
	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg		
EQL	0.01	0.00005	0.005	0.00005	0.005	0.00001	0.005	0.00001	0.005	0.00001	0.005
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold											
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold											
EPA Victoria IWRG621 Category B Leached Upper Limits											
EPA Victoria IWRG621 Category B Upper Limits											
EPA Victoria IWRG621 Category C Leached Upper Limits											
EPA Victoria IWRG621 Category C Upper Limits											
EPA Victoria IWRG621 Fill Upper Limits											

Location Code	Field ID	Perfluorooctanoic acid (PFOS)	N-Methylperfluorooctanesulfonamideethanol (N-MeFOSE)	Perfluorobutanoic acid (PFBA)	Perfluorobutane sulfonic acid (PFBS)		Perfluorodecanoic acid (PFDA)		Perfluorododecanoic acid (PFDoDA)			
		mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg		
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002	
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002	
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	<0.01		<0.005		<0.005		<0.005		<0.005		<0.005
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	<0.01		<0.005		<0.005		<0.005		<0.005		<0.005
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002	
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	<0.01		<0.005		<0.005		<0.005		<0.005		<0.005
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	<0.01		<0.005		<0.005		<0.005		<0.005		<0.005
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	<0.01		<0.005		<0.005		<0.005		<0.005		<0.005
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002	
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002	
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	<0.01		<0.005		<0.005		<0.005		<0.005		<0.005
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002	
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050

		N-MeFOSAA		N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)		Perfluorobutanoic acid (PFBA)		Perfluorobutane sulfonic acid (PFBS)		Perfluorodecanoic acid (PFDA)		Perfluorododecanoic acid (PFDoDA)	
		mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	<0.01		<0.005		<0.005		<0.005		<0.005		<0.005	
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	<0.01		<0.005		<0.005		<0.005		<0.005		<0.005	
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001

	PFOS/PFOA											
	Perfluorodecanesulfonic acid (PFDs)		Perfluoroheptanoic acid (PFHpA)		Perfluoroheptane sulfonic acid (PFHpS)		Perfluorohexanoic acid (PFHxA)		Perfluorononanoic acid (PFNA)		Perfluoronanesulfonic acid	
	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	
EQL	0.00001	0.005	0.00001	0.005	0.00001	0.005	0.00001	0.005	0.00001	0.005	0.00001	
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold												
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold												
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold												
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold												
EPA Victoria IWRG621 Category B Leached Upper Limits												
EPA Victoria IWRG621 Category B Upper Limits												
EPA Victoria IWRG621 Category C Leached Upper Limits												
EPA Victoria IWRG621 Category C Upper Limits												
EPA Victoria IWRG621 Fill Upper Limits												

Location Code	Field ID	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF		<0.005		<0.005		<0.005		<0.005		<0.005	
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005	
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005	
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005	
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF		<0.005		<0.005		<0.005		<0.005		<0.005	
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005	
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS	<0.00002		<0.00002		<0.00002		<0.00002		<0.00002		
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	

		PFOS/PFOA										
		Perfluorodecanesulfonic acid (PFDS)		Perfluoroheptanoic acid (PFHPA)		Perfluoroheptane sulfonic acid (PFHPS)		Perfluorohexanoic acid (PFHxA)		Perfluorononanoic acid (PFNA)		Perfluoronanesulfonic
		mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF		<0.005		<0.005		<0.005		<0.005		<0.005	
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005	
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001

	acid (PFNS)(trace)	Perfluorooctanoic acid (PFOA)		Perfluorooctane sulfonamide (PFOSA)		Perfluoropentanoic acid (PFPeA)		Perfluoropentane sulfonic acid (PFPeS)		Perfluoropropanesulfonic acid (PFPrS)	
	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
EQL	0.005	0.00001	0.005	0.00005	0.005	0.00001	0.005	0.00001	0.005	0.00001	0.005
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold		0									
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold		0.00056									
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold		0.0056									
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold		0.056									
EPA Victoria IWRG621 Category B Leached Upper Limits											
EPA Victoria IWRG621 Category B Upper Limits											
EPA Victoria IWRG621 Category C Leached Upper Limits											
EPA Victoria IWRG621 Category C Upper Limits											
EPA Victoria IWRG621 Fill Upper Limits											

Location Code	Field ID										
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS		<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS		<0.00001		<0.00005		<0.00002		<0.00002		
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS		<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS		<0.00001		<0.00005		<0.00002		<0.00002		
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	<0.005		<0.005		<0.005		<0.005		<0.005	<0.005
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.005		<0.005	<0.005
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS		<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS		<0.00001		<0.00005		<0.00002		<0.00002		
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.005		<0.005	<0.005
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.005		<0.005	<0.005
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	<0.005		<0.005		<0.005		<0.005		<0.005	<0.005
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS		<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS		<0.00001		<0.00005		<0.00002		<0.00002		
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS		<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS		<0.00001		<0.00005		<0.00002		<0.00002		
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.005		<0.005	<0.005
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS		<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS		<0.00001		<0.00005		<0.00002		<0.00002		
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS		<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	

		acid (PFNS)(trace)		Perfluorooctanoic acid (PFOA)		Perfluorooctane sulfonamide (PFOSA)		Perfluoropentanoic acid (PFPeA)		Perfluoropentane sulfonic acid (PFPeS)		Perfluoropropanesulfonic acid (PFPrS)	
		mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005	
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005	
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001

		Perfluorotetradecanoic acid (PFTeDA)		Perfluorotridecanoic acid (PFTrDA)		Perfluoroundecanoic acid (PFUnDA)		Perfluorooctanesulfonic acid (PFOS)		Perfluorohexane sulfonic acid (PFHxS)		mg/L
		mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF		<0.005		<0.005		<0.005		<0.005		<0.005	
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005	
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001

	Sum of US EPA PFAS (PFOS + PFOA)*		Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*		Sum of PFAS		1,1-dichloroethane	1,1-dichloroethene	1,2,3-trichloropropane	1,2-dichloroethane	
	mg/kg	mg/L	mg/kg	mg/L	mg/L	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
EQL	0.005	0.00001	0.005	0.00001	0.005	0.0001	0.05	0.5	0.5	0.5	0.5
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold											
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold											
EPA Victoria IWRG621 Category B Leached Upper Limits											
EPA Victoria IWRG621 Category B Upper Limits											
EPA Victoria IWRG621 Category C Leached Upper Limits											
EPA Victoria IWRG621 Category C Upper Limits											
EPA Victoria IWRG621 Fill Upper Limits											

Location Code	Field ID										
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS	<0.0050					<0.00010	<0.0500		<0.50	<0.50
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS						<0.00010				
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS	<0.0050					<0.00010	<0.0500		<0.50	<0.50
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS						<0.00010				
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	<0.005	<0.005		<0.005		<0.00010	<0.05	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF			<0.00001	<0.00001		<0.0001				
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF			<0.00001	<0.00001		<0.0001				
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	<0.005	<0.005		<0.005		<0.00010	<0.05	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF			<0.00001	<0.00001		<0.0001				
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF			<0.00001	<0.00001		<0.0001				
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS	<0.0050					<0.00010	<0.0500		<0.50	<0.50
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS						<0.00010				
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	<0.005	<0.005		<0.005		<0.00010	<0.05	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF			<0.00001	<0.00001		<0.0001				
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF			<0.00001	<0.00001		<0.0001				
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	<0.005	<0.005		<0.005		<0.00010	<0.05	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF			<0.00001	<0.00001		<0.0001				
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF			<0.00001	<0.00001		<0.0001				
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	<0.005	<0.005		<0.005		<0.00010	<0.05	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF			<0.00001	<0.00001		<0.0001				
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF			<0.00001	<0.00001		<0.0001				
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS	<0.0050					<0.00010	<0.0500		<0.50	<0.50
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS						<0.00010				
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS	<0.0050					<0.00010	<0.0500		<0.50	<0.50
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS						<0.00010				
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	<0.005	<0.005		<0.005		<0.00010	<0.05	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF			<0.00001	<0.00001		<0.0001				
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF			<0.00001	<0.00001		<0.0001				
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS	<0.0050					<0.00010	<0.0500		<0.50	<0.50
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS						<0.00010				
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS	<0.0050					<0.00010	<0.0500		<0.50	<0.50

		Sum of US EPA PFAS (PFOS + PFOA)*		Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*		Sum of PFAS		1,1-dichloroethane	1,1-dichloroethene	1,2,3-trichloropropane	1,2-dichloroethane	
		mg/kg	mg/L	mg/kg	mg/L	mg/L	mg/kg					mg/kg
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS						<0.00010					
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF		<0.00001		<0.00001		<0.0001					
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF		<0.00001		<0.00001		<0.0001					
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF		<0.00001		<0.00001		<0.0001					
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF		<0.00001		<0.00001		<0.0001					
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS	<0.0050					<0.00010	<0.0500		<0.50		<0.50
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS						<0.00010					
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF		<0.00001		<0.00001		<0.0001					
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF		<0.00001		<0.00001		<0.0001					
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF	<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF		<0.00001		<0.00001		<0.0001					
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF		<0.00001		<0.00001		<0.0001					
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS	<0.0050					<0.00010	<0.0500		<0.50		<0.50
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS						<0.00010					
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS	<0.0050					<0.00010	<0.0500		<0.50		<0.50
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS						<0.00010					
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF		<0.00001		<0.00001		<0.0001					
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF		<0.00001		<0.00001		<0.0001					
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS	<0.0050					<0.00010	<0.0500		<0.50		<0.50
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS						<0.00010					
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF		<0.00001		<0.00001		<0.0001					
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF		<0.00001		<0.00001		<0.0001					
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS	<0.0050					<0.00010	<0.0500		<0.50		<0.50
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS						<0.00010					
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF		<0.00001		<0.00001		<0.0001					
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF		<0.00001		<0.00001		<0.0001					
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS	<0.0050					<0.00010	<0.0500		<0.50		<0.50
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS						<0.00010					
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF		<0.00001		<0.00001		<0.0001					
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF		<0.00001		<0.00001		<0.0001					
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS	<0.0050					<0.00010	<0.0500		<0.50		<0.50
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS						<0.00010					
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS	<0.0050					<0.00010	<0.0500		<0.50		<0.50
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS						<0.00010					
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS	<0.0050					<0.00010	<0.0500		<0.50		<0.50
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS						<0.00010					

		Sum of US EPA PFAS (PFOS + PFOA)*		Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*		Sum of PFAS		1,1-dichloroethane	1,1-dichloroethene	1,2,3-trichloropropane	1,2-dichloroethane
		mg/kg	mg/L	mg/kg	mg/L	mg/L	mg/kg				
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	<0.005		<0.005		<0.005	<0.05	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF		<0.00001		<0.00001	<0.0001					
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF		<0.00001		<0.00001	<0.0001					
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	<0.005		<0.005		<0.005	<0.05	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF		<0.00001		<0.00001	<0.0001					
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF		<0.00001		<0.00001	<0.0001					

	1,2-dichloropropane	1,3-dichloropropane	Bromochloromethane	1,1,1,2-tetrachloroethane	Bromodichloromethane	1,1,1-trichloroethane	Chloroform	1,1,2,2-tetrachloroethane	Chloromethane	cis-1,3-dichloropropene	Dibromomethane	Chlorinated t
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold												
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold												
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold												
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold												
EPA Victoria IWRG621 Category B Leached Upper Limits												
EPA Victoria IWRG621 Category B Upper Limits												
EPA Victoria IWRG621 Category C Leached Upper Limits												
EPA Victoria IWRG621 Category C Upper Limits												
EPA Victoria IWRG621 Fill Upper Limits												

Location Code	Field ID	1,2-dichloropropane	1,3-dichloropropane	Bromochloromethane	1,1,1,2-tetrachloroethane	Bromodichloromethane	1,1,1-trichloroethane	Chloroform	1,1,2,2-tetrachloroethane	Chloromethane	cis-1,3-dichloropropene	Dibromomethane
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS				<0.50		<0.50	<0.50	<0.50			
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS											
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS				<0.50		<0.50	<0.50	<0.50			
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS											
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF											
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF											
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF											
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF											
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS				<0.50		<0.50	<0.50	<0.50			
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS											
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF											
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF											
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF											
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF											
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS				<0.50		<0.50	<0.50	<0.50			
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS											
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS				<0.50		<0.50	<0.50	<0.50			
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS											
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF											
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF											
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS				<0.50		<0.50	<0.50	<0.50			
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS											
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS				<0.50		<0.50	<0.50	<0.50			

		Chlorinated t										
		1,2-dichloropropane	1,3-dichloropropane	Bromochloromethane	1,1,1,2-tetrachloroethane	Bromodichloromethane	1,1,1-trichloroethane	Chloroform	1,1,2,2-tetrachloroethane	Chloromethane	cis-1,3-dichloropropene	Dibromomethane
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS				<0.50		<0.50	<0.50	<0.50			
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS				<0.50		<0.50	<0.50	<0.50			
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS											
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS				<0.50		<0.50	<0.50	<0.50			
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS				<0.50		<0.50	<0.50	<0.50			
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS				<0.50		<0.50	<0.50	<0.50			
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS				<0.50		<0.50	<0.50	<0.50			
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS				<0.50		<0.50	<0.50	<0.50			
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS				<0.50		<0.50	<0.50	<0.50			
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS				<0.50		<0.50	<0.50	<0.50			
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS											

		Chlorinated t										
		1,2-dichloropropane	1,3-dichloropropane	Bromochloromethane	1,1,1,2-tetrachloroethane	Bromodichloromethane	1,1,1-trichloroethane	Chloroform	1,1,2,2-tetrachloroethane	Chloromethane	cis-1,3-dichloropropene	Dibromomethane
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											

hydrocarbons

	Dichloromethane	Hexachlorobutadiene	Other chlorinated hydrocarbons EPAVic	Trichloroethene	Chlorinated hydrocarbons EPAVic	cis-1,2-dichloroethene	1,1,2-trichloroethane	trans-1,3-dichloropropene	Vinyl chloride	Bromoform	Carbon tetrachloride
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold											
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold											
EPA Victoria IWRG621 Category B Leached Upper Limits											
EPA Victoria IWRG621 Category B Upper Limits		11	50						4.8		
EPA Victoria IWRG621 Category C Leached Upper Limits											
EPA Victoria IWRG621 Category C Upper Limits		2.8	10						1.2		
EPA Victoria IWRG621 Fill Upper Limits					1						

Location Code	Field ID										
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	<0.50
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS										
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	<0.50
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS										
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF										
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF										
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF										
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF										
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	<0.50
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS										
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF										
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF										
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF										
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF										
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF										
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF										
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	<0.50
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS										
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	<0.50
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS										
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF										
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF										
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	<0.50
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS										
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	<0.50

hydrocarbons

		Dichloromethane	Hexachlorobutadiene	Other chlorinated hydrocarbons EPAVic	Trichloroethene	Chlorinated hydrocarbons EPAVic	cis-1,2-dichloroethene	1,1,2-trichloroethane	trans-1,3-dichloropropene	Vinyl chloride	Bromoform	Carbon tetrachloride
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50		<0.50
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50		<0.50
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS											
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50		<0.50
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50		<0.50
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50		<0.50
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50		<0.50
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50		<0.50
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50		<0.50
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS	<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50		<0.50
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS											

hydrocarbons

		Dichloromethane	Hexachlorobutadiene	Other chlorinated hydrocarbons EPAVIC	Trichloroethene	Chlorinated hydrocarbons EPAVIC	cis-1,2-dichloroethene	1,1,2-trichloroethane	trans-1,3-dichloropropene	Vinyl chloride	Bromoform	Carbon tetrachloride
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											

					NA			PC			
	Chlorodibromomethane	Chloroethane	trans-1,2-dichloroethene	Tetrachloroethene	Sum of WA DWER PFAS (n=10)*	Moisture Content	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	
	mg/kg	mg/kg	mg/kg	mg/kg	UG/KG	µg/L	%	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.05		1	0.1	0.1	0.1	0.1
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold											
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold											
EPA Victoria IWRG621 Category B Leached Upper Limits											
EPA Victoria IWRG621 Category B Upper Limits											
EPA Victoria IWRG621 Category C Leached Upper Limits											
EPA Victoria IWRG621 Category C Upper Limits											
EPA Victoria IWRG621 Fill Upper Limits											

Location Code	Field ID										
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS			<0.50	<0.50	<10.0	<0.05	27.4			
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS						<0.05				
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS			<0.50	<0.50	<10.0	<0.05	27.5			
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS						<0.05				
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF					<0.05					
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF					<0.05					
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF					<0.05					
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF					<0.05					
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS			<0.50	<0.50	<10.0	<0.05	24.2			
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS						<0.05				
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF					<0.05					
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF					<0.05					
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF					<0.05					
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF					<0.05					
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF					<0.05					
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF					<0.05					
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS			<0.50	<0.50	<10.0	<0.05	29.4			
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS						<0.05				
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS			<0.50	<0.50	<10.0	<0.05	25.1			
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS						<0.05				
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF					<0.05					
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF					<0.05					
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS			<0.50	<0.50	<10.0	<0.05	28.8			
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS						<0.05				
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS			<0.50	<0.50	<10.0	<0.05	27.7			

		NA						PC				
		Chlorodibromomethane	Chloroethane	trans-1,2-dichloroethene	Tetrachloroethene	Sum of WA DWER PFAS (n=10)*	Moisture Content	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	
		mg/kg	mg/kg	mg/kg	mg/kg	UG/KG	µg/L	%	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS						<0.05					
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF					<0.05						
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF					<0.05						
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF					<0.05						
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF					<0.05						
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS			<0.50	<0.50	<10.0	<0.05	27.3				
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS						<0.05					
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF					<0.05						
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF					<0.05						
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF					<0.05						
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF					<0.05						
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS			<0.50	<0.50	<10.0	<0.05	26.7				
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS						<0.05					
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS			<0.50	<0.50	<10.0	<0.05	26.8				
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS						<0.05					
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF					<0.05						
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF					<0.05						
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS			<0.50	<0.50	<10.0	<0.05	25.2				
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS						<0.05					
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF					<0.05						
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF					<0.05						
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS			<0.50	<0.50	<10.0	<0.05	26.8				
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS						<0.05					
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF					<0.05						
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF					<0.05						
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS			<0.50	<0.50	<10.0	<0.05	23.2				
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS						<0.05					
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF					<0.05						
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF					<0.05						
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS			<0.50	<0.50	<10.0	<0.05	27.9				
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS						<0.05					
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS			<0.50	<0.50	<10.0	<0.05	27.2				
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS						<0.05					
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS			<0.50	<0.50	<10.0	<0.05	27				
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS						<0.05					

		NA						PC				
		Chlorodibromomethane	Chloroethane	trans-1,2-dichloroethene	Tetrachloroethene	Sum of WA DWER PFAS (n=10)*		Moisture Content	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254
		mg/kg	mg/kg	mg/kg	mg/kg	UG/KG	µg/L	%	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF					<0.05						
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF					<0.05						
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF					<0.05						
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF					<0.05						

	Bs				Inorganics						
	Arochlor 1221	Arochlor 1260	Arochlor 1016	PCBs (Sum of total)	pH (after HCL)	pH (Final)	pH (Initial)	pH of Leaching Fluid	pH (aqueous extract)	Fluoride	Moisture Content (dried @ 103°C)
	mg/kg	mg/kg	mg/kg	mg/kg	-	-	-	-	-	mg/kg	%
EQL	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	1
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold											
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold											
EPA Victoria IWRG621 Category B Leached Upper Limits											
EPA Victoria IWRG621 Category B Upper Limits										40,000	
EPA Victoria IWRG621 Category C Leached Upper Limits											
EPA Victoria IWRG621 Category C Upper Limits										10,000	
EPA Victoria IWRG621 Fill Upper Limits				2						450	

Location Code	Field ID											
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS				<0.1	1.6	5.4	9.5	5		140	
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS						9.8					
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS				<0.1	1.5	5.1	9.6	5		160	
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS						10.1					
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	<0.1	<0.1	<0.1	<0.1					9.5	<100	31
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF						5.1		5			
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF						9.5		6.6			
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1					9.4	<100	28
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF						5.2		5			
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF						9.3		6.6			
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS				<0.1	1.5	4.7	9.1	5		130	
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS						9.7					
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1					9.6	<100	27
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF						5.2		5			
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF						9.5		6.6			
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1					9.5	<100	26
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF						5.2		5			
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF						9.6		6.6			
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	<0.1	<0.1	<0.1	<0.1					9.6	<100	28
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF						5.2		5			
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF						9.6		6.6			
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS				<0.1	1.4	5.1	9.4	5		140	
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS						9.9					
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS				<0.1	1.5	5.7	9.1	5		140	
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS						9.2					
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1					9.6	<100	29
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF						5.2		5			
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF						9.6		6.6			
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS				<0.1	1.5	5.1	9.5	5		160	
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS						10.1					
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS				<0.1	1.5	4.4	8.6	5		140	

		Bs				Inorganics						
		Arochlor 1221	Arochlor 1260	Arochlor 1016	PCBs (Sum of total)	pH (after HCL)	pH (Final)	pH (Initial)	pH of Leaching Fluid	pH (aqueous extract)	Fluoride	Moisture Content (dried @ 103°C)
		mg/kg	mg/kg	mg/kg	mg/kg	-	-	-	-	-	mg/kg	%
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS						9.4					
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1					9	<100	35
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF						5.2		5			
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF						9.1		6.6			
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1					8.6	<100	32
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF						5.1		5			
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF						9.2		6.6			
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS				<0.1	1.5	5.3	8.7	5		140	
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS						9.4					
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1					9.4	490	27
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF						5		5			
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF						6.3		6.4			
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF	<0.1	<0.1	<0.1	<0.1					9.2	<100	21
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF						5		5			
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF						9.1		6.4			
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS				<0.1	1.5	5.1	9.7	5		120	
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS						10.1					
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS				<0.1	1.5	5.1	9.5	5		180	
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS						10.1					
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1					9.3	<100	23
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF						5.1		5			
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF						9.1		6.4			
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS				<0.1	1.4	5	9.8	5		160	
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS						9.9					
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1					9.1	<100	19
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF						5.1		5			
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF						9.1		6.4			
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS				<0.1	1.5	5.1	9.6	5		130	
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS						10.2					
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1					8.9	<100	24
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF						5.2		5			
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF						9.1		6.4			
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS				<0.1	1.4	5.1	9.7	5		160	
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS						10.1					
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1					9.1	<100	23
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF						5		5			
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF						7.6		6.4			
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS				<0.1	1.4	5	9.7	5		150	
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS						10.1					
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS				<0.1	1.4	5	9.2	5		130	
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS						9.7					
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS				<0.1	1.4	5	9.5	5		190	
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS						9.7					

		Bs				Inorganics						
		Arochlor 1221	Arochlor 1260	Arochlor 1016	PCBs (Sum of total)	pH (after HCL)	pH (Final)	pH (Initial)	pH of Leaching Fluid	pH (aqueous extract)	Fluoride	Moisture Content (dried @ 103°C)
		mg/kg	mg/kg	mg/kg	mg/kg	-	-	-	-	-	mg/kg	%
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	<0.1	<0.1	<0.1	<0.1					8.7	<100	27
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF						5		5			
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF						7.2		6.4			
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	<0.1	<0.1	<0.1	<0.1					8.6	<100	27
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF						5		5			
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF						7.3		6.4			

	Halogenated Benzenes							Halogenated Hydrocarbons			
	Cyanide Total	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Bromobenzene	4-chlorotoluene	Chlorobenzene	Iodomethane	Bromomethane	1,2-dibromoethane
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold											
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold											
EPA Victoria IWRG621 Category B Leached Upper Limits											
EPA Victoria IWRG621 Category B Upper Limits	10,000										
EPA Victoria IWRG621 Category C Leached Upper Limits											
EPA Victoria IWRG621 Category C Upper Limits	2,500										
EPA Victoria IWRG621 Fill Upper Limits	50										

Location Code	Field ID										
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS	<5	<0.50	<0.50		<0.50			<0.50		
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS										
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS	<5	<0.50	<0.50		<0.50			<0.50		
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS										
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF										
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF										
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF										
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF										
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS	<5	<0.50	<0.50		<0.50			<0.50		
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS										
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF										
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF										
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF										
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF										
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF										
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF										
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS	<5	<0.50	<0.50		<0.50			<0.50		
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS										
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS	<5	<0.50	<0.50		<0.50			<0.50		
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS										
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF										
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF										
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS	<5	<0.50	<0.50		<0.50			<0.50		
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS										
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS	<5	<0.50	<0.50		<0.50			<0.50		

		Halogenated Benzenes							Halogenated Hydroca			
		Cyanide Total	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Bromobenzene	4-chlorotoluene	Chlorobenzene	Iodomethane	Bromomethane	1,2-dibromoethane
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS	<5	<0.50	<0.50		<0.50		<0.50				
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS	<5	<0.50	<0.50		<0.50		<0.50				
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS											
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS	<5	<0.50	<0.50		<0.50		<0.50				
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS	<5	<0.50	<0.50		<0.50		<0.50				
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS	<5	<0.50	<0.50		<0.50		<0.50				
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS	<5	<0.50	<0.50		<0.50		<0.50				
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS	<5	<0.50	<0.50		<0.50		<0.50				
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS	<5	<0.50	<0.50		<0.50		<0.50				
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS	<5	<0.50	<0.50		<0.50		<0.50				
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS											

		Halogenated Benzenes							Halogenated Hydroca			
		Cyanide Total	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Bromobenzene	4-chlorotoluene	Chlorobenzene	Iodomethane	Bromomethane	1,2-dibromoethane
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											

	rbons		MAH						Solvents		
	Dichlorodifluoromethane	Trichlorofluoromethane	Total MAH	Monocyclic aromatic hydrocarbons EPAVic	1,3,5-trimethylbenzene	Styrene	Isopropylbenzene	1,2,4-trimethylbenzene	4-Methyl-2-pentanone	Acetone	Allyl chloride
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold											
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold											
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold											
EPA Victoria IWRG621 Category B Leached Upper Limits											
EPA Victoria IWRG621 Category B Upper Limits				240							
EPA Victoria IWRG621 Category C Leached Upper Limits											
EPA Victoria IWRG621 Category C Upper Limits				70							
EPA Victoria IWRG621 Fill Upper Limits				7							

Location Code	Field ID										
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS				<0.5		<0.5				
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS										
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS				<0.5		<0.5				
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS										
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF										
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF										
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF										
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF										
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS				<0.5		<0.5				
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS										
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	<0.5	<0.5	1.4		<0.5	<0.5	1.4	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF										
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF										
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF										
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF										
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF										
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF										
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS				<0.5		<0.5				
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS										
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS				<0.5		<0.5				
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS										
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF										
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF										
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS				<0.5		<0.5				
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS										
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS				<0.5		<0.5				

		rbons		MAH						Solvents		
		Dichlorodifluoromethane	Trichlorofluoromethane	Total MAH	Monocyclic aromatic hydrocarbons EPAVic	1,3,5-trimethylbenzene	Styrene	Isopropylbenzene	1,2,4-trimethylbenzene	4-Methyl-2-pentanone	Acetone	Allyl chloride
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF											
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS				<0.5		<0.5					
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF											
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS				<0.5		<0.5					
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS											
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS				<0.5		<0.5					
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS				<0.5		<0.5					
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS				<0.5		<0.5					
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS				<0.5		<0.5					
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS				<0.5		<0.5					
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS				<0.5		<0.5					
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS											
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS				<0.5		<0.5					
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS											

		rbons		MAH						Solvents		
		Dichlorodifluoromethane	Trichlorofluoromethane	Total MAH	Monocyclic aromatic hydrocarbons EPAVic	1,3,5-trimethylbenzene	Styrene	isopropylbenzene	1,2,4-trimethylbenzene	4-Methyl-2-pentanone	Acetone	Allyl chloride
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF											

	SPOCAS		
	Carbon disulfide	Methyl Ethyl Ketone	pH (CaCl2)
	mg/kg	mg/kg	-
EQL	0.5	0.5	0.1
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold			
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold			
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold			
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold			
EPA Victoria IWRG621 Category B Leached Upper Limits			
EPA Victoria IWRG621 Category B Upper Limits			
EPA Victoria IWRG621 Category C Leached Upper Limits			
EPA Victoria IWRG621 Category C Upper Limits			
EPA Victoria IWRG621 Fill Upper Limits			

Location Code	Field ID			
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS			8.7
C07.01	SX_OB_20220322_07_57_SS_Primary_ALS			
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS			8.6
C07.01	SX_OB_20220322_07_58_SS_Duplicate_ALS			
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF	<0.5	<0.5	
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF			
C07.01	SX_OB_20220322_07_59_SS_Triplicate_EUF			
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF	<0.5	<0.5	
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF			
C07.01	SX_OB_20220322_08_04_SS_Primary_EUF			
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS			8.1
C07.01	SX_OB_20220322_11_53_SS_Primary_ALS			
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF	<0.5	<0.5	
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF			
C07.01	SX_OB_20220322_11_59_SS_Primary_EUF			
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF	<0.5	<0.5	
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF			
C07.01	SX_OB_20220322_15_54_SS_Primary_EUF			
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF	<0.5	<0.5	
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF			
C07.01	SX_OB_20220322_15_55_SS_Duplicate_EUF			
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS			8.8
C07.01	SX_OB_20220322_15_56_SS_Triplicate_ALS			
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS			8.1
C07.01	SX_OB_20220322_16_02_SS_Primary_ALS			
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF	<0.5	<0.5	
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF			
C07.01	SX_OB_20220322_20_06_SS_Primary_EUF			
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS			8.6
C07.01	SX_OB_20220322_20_15_SS_Primary_ALS			
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS			7.8

				SPOCAS
		Carbon disulfide	Methyl Ethyl Ketone	pH (CaCl2)
		mg/kg	mg/kg	-
C07.01	SX_OB_20220323_00_05_SS_Primary_ALS			
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF	<0.5	<0.5	
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF			
C07.01	SX_OB_20220323_00_15_SS_Primary_EUF			
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF	<0.5	<0.5	
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF			
C07.01	SX_OB_20220323_03_59_SS_Primary_EUF			
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS			7.8
C07.01	SX_OB_20220323_04_04_SS_Primary_ALS			
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF	<0.5	<0.5	
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF			
C07.01	SX_OB_20220406_13_39_SS_Primary_EUF			
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF	<0.5	<0.5	
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF			
C07.01	SX_OB_20220406_13_41_SS_Duplicate_EUF			
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS			8.2
C07.01	SX_OB_20220406_13_42_SS_Triplicate_ALS			
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS			8.1
C07.01	SX_OB_20220406_13_44_SS_Primary_ALS			
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF	<0.5	<0.5	
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF			
C07.01	SX_OB_20220406_13_45_SS_Primary_EUF			
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS			8
C07.01	SX_OB_20220406_13_46_SS_Primary_ALS			
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF	<0.5	<0.5	
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF			
C07.01	SX_OB_20220406_13_46_SS_Primary_EUF			
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS			8.1
C07.01	SX_OB_20220406_13_47_SS_Primary_ALS			
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF	<0.5	<0.5	
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF			
C07.01	SX_OB_20220406_13_48_SS_Primary_EUF			
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS			7.9
C07.01	SX_OB_20220406_13_49_SS_Primary_ALS			
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF	<0.5	<0.5	
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF			
C07.01	SX_OB_20220406_13_50_SS_Primary_EUF			
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS			7.8
C07.01	SX_OB_20220406_13_51_SS_Primary_ALS			
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS			7.8
C07.01	SX_OB_20220406_13_52_SS_Primary_ALS			
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS			7.9
C07.01	SX_OB_20220406_13_53_SS_Duplicate_ALS			

		SPOCAS		
		Carbon disulfide	Methyl Ethyl Ketone	pH (CaCl2)
		mg/kg	mg/kg	-
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF	<0.5	<0.5	
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF			
C07.01	SX_OB_20220406_13_54_SS_Triplicate_EUF			
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF	<0.5	<0.5	
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF			
C07.01	SX_OB_20220406_13_55_SS_Primary_EUF			

RPD Calculations

								Metals									
								Arsenic	Cadmium	Copper	Chromium (III+VI)	Chromium (hexavalent)	Lead	Mercury	Molybdenum	Nickel	Selenium
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								2	0.4	5	5	1	5	0.1	5	5	2
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample										
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		59	<0.4	98	190	<1	7.1	<0.1	<5	250	<2
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46838	39	<0.4	86	190	<1	7.2	<0.1	<5	270	<2
RPD								41	0	13	0	0	1	0	0	8	0
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		59	<0.4	98	190	<1	7.1	<0.1	<5	250	<2
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46838	27	<1	56	93	<1.0	<5	<0.1	<5	170	<5
RPD								74	0	55	69	0	35	0	0	38	0
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal											
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46847										
RPD																	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal											
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46854										
RPD																	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal											
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46854										
RPD																	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal											
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138011										
RPD																	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal											
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138011										
RPD																	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		26	<1	49	81	<1.0	<5	<0.1	<5	145	<5
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138001	22	<1	47	81	<1.0	<5	<0.1	<5	146	<5
RPD								17	0	4	0	0	0	0	0	1	0
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		26	<1	49	81	<1.0	<5	<0.1	<5	145	<5
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001	38	<0.4	67	130	<1	5.4	<0.1	<5	200	<2
RPD								38	0	31	46	0	8	0	0	32	0
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		26	<1	49	81	<1.0	<5	<0.1	<5	145	<5
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001										
RPD																	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		48	<0.4	96	180	<1	6.1	<0.1	<5	280	<2
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012318	41	<0.4	85	160	<1	5.2	<0.1	<5	280	<2
RPD								16	0	12	12	0	16	0	0	0	0
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		48	<0.4	96	180	<1	6.1	<0.1	<5	280	<2
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012318	23	<1	53	92	<1.0	<5	<0.1	<5	170	<5
RPD								70	0	58	65	0	20	0	0	49	0
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal											
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012328										
RPD																	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal											
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012336										
RPD																	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		25	<1	56	104	1.6	<5	<0.1	<5	205	<5
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218007	23	<1	48	94	1.4	<5	<0.1	<5	164	<5
RPD								8	0	15	10	13	0	0	0	22	0
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		25	<1	56	104	1.6	<5	<0.1	<5	205	<5
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007	33	<0.4	79	170	<1	<5	<0.1	<5	240	<2
RPD								28	0	34	48	46	0	0	0	16	0
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		25	<1	56	104	1.6	<5	<0.1	<5	205	<5
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007										
RPD																	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal											
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218017										
RPD																	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal											
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218017										
RPD																	

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

RPD Calculations

Metals									
Arsenic	Cadmium	Copper	Chromium (III+VI)	Chromium (hexavalent)	Lead	Mercury	Molybdenum	Nickel	Selenium
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

RPD Calculations

								Silver	Tin	Zinc	PAHs (Vic EPA List)	Benzo(b+h)fluoranthene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene TEQ calc (Zero)	
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								2	10	5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<2	<10	160			<0.5	<0.5	<0.5	<0.5	<0.5	
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46838	<2	<10	170			<0.5	<0.5	<0.5	<0.5	<0.5	
RPD								0	0	6			0	0	0	0	0	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<2	<10	160			<0.5	<0.5	<0.5	<0.5	<0.5	
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46838	<2	<10	100	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	
RPD								0	0	46			0	0	0	0	0	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal												
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46847											
RPD																		
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal												
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46854											
RPD																		
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal												
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46854											
RPD																		
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal												
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138011											
RPD																		
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal												
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138011											
RPD																		
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<2	<10	78	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138001	<2	<10	83	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	
RPD								0	0	6	0	0	0	0	0	0	0	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<2	<10	78	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001	<2	<10	130	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	
RPD								0	0	50			0	0	0	0		
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<2	<10	78	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001											
RPD																		
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<2	<10	180			<0.5	<0.5	<0.5	<0.5	<0.5	
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012318	<2	<10	190			<0.5	<0.5	<0.5	<0.5	<0.5	
RPD								0	0	5			0	0	0	0		
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<2	<10	180			<0.5	<0.5	<0.5	<0.5	<0.5	
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012318	<2	<10	98	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	
RPD								0	0	59			0	0	0	0		
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal												
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012328											
RPD																		
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal												
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012336											
RPD																		
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal												
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012336											
RPD																		
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<2	<10	100	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218007	<2	<10	78	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	
RPD								0	0	25	0	0	0	0	0	0		
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<2	<10	100	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007	<2	<10	140	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	
RPD								0	0	33			0	0	0	0		
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<2	<10	100	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007											
RPD																		
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal												
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218017											
RPD																		
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal												
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218017											
RPD																		

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

RPD Calculations

Silver	Tin	Zinc	PAHs (Vic EPA List)	Benzo(b+h+k)fluoranthene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene TEQ calc (Zero)
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

RPD Calculations

								PAH									
								Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Half)	Benzo(e) pyrene	Benzo(b+g)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Benzo(a,h,i)anthracene	Fluoranthene	Fluorene
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample										
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46838	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0	0	0	0	0	0	0
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46838	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0	0	0	0	0	0	0
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal											
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46847										
RPD																	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal											
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46854										
RPD																	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal											
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46854										
RPD																	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal											
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138011										
RPD																	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal											
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138011										
RPD																	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138001	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0	0	0	0	0	0	0
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0	0	0	0	0	0	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0	0	0	0	0	0	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012318	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0	0	0	0	0	0	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012318	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0	0	0	0	0	0	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal											
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012328										
RPD																	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal											
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012336										
RPD																	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal											
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012336										
RPD																	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218007	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0	0	0	0	0	0	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0	0	0	0	0	0	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007	1.2	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD																	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal											
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218017										
RPD																	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal											
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218017										
RPD																	

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

RPD Calculations

PAH									
Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Half)	Benzo(e) pyrene	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

RPD Calculations

								BTEX										
								Indeno (1,2,3-c-d)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Sum of total)	Benzene	Ethylbenzene	Toluene	Xylene (o)	Xylene (m & p)	
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								0.5	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.2
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46838	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	
RPD								0	0	0	0	0	0	0	0	0	0	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46838	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	
RPD								0	0	0	0	0	0	0	0	0		
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal												
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46847											
RPD																		
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal												
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46854											
RPD																		
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal												
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46854											
RPD																		
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal												
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138011											
RPD																		
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal												
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138011											
RPD																		
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138001	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	
RPD								0	0	0	0	0	0	0	0	0		
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	
RPD								0	0	0	0	0	0	0	0	0		
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001											
RPD																		
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012318	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	
RPD								0	0	0	0	0	0	0	0	0		
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012318	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	
RPD								0	0	0	0	0	0	0	0	0		
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal												
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012328											
RPD																		
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal												
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012336											
RPD																		
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	
RPD								0	0	0	0	0	0	0	0	0		
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	
RPD								0	0	0	0	0	0	0	0	0		
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007											
RPD																		
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal												
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218017											
RPD																		
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal												
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218017											
RPD																		

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

RPD Calculations

					BTEX				
Indeno(1,2,3-c-d)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Sum of total)	Benzene	Ethylbenzene	Toluene	Xylene (o)	Xylene (m & p)
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

RPD Calculations

EQL	TRH																	
	Xylene Total	C6-C10	C6-C10 (F1 minus BTEX)	C10-C16	C10-C16 (F2 minus Naphthalene)	C16-C34	C34-C40	C10-C40 (Sum of total)	C6-C9	C10-C14								
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg								
	0.3	20	20	50	50	100	100	50	20	20								
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46838	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	
RPD								0	0	0	0	0	0	0	0	0	0	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46838	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	
RPD								0	0	0	0	0	0	0	0	0		
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal												
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46847											
RPD																		
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal												
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46854											
RPD																		
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal												
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46854											
RPD																		
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal												
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138011											
RPD																		
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal												
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138011											
RPD																		
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138001	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	
RPD								0	0	0	0	0	0	0	0	0		
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	
RPD								0	0	0	0	0	0	0	0	0		
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001											
RPD																		
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012318	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	
RPD								0	0	0	0	0	0	0	0	0		
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012318	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	
RPD								0	0	0	0	0	0	0	0	0		
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal												
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012328											
RPD																		
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal												
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012336											
RPD																		
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal												
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012336											
RPD																		
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218007	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	
RPD								0	0	0	0	0	0	0	0	0		
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20	
RPD								0	0	0	0	0	0	0	0	0		
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50	
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007											
RPD																		
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal												
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218017											
RPD																		
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal												
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218017											
RPD																		

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

RPD Calculations

		TRH							
Xylene Total	C6-C10	C6-C10 (F1 minus BTEX)	C10-C16	C10-C16 (F2 minus Naphthalene)	C16-C34	C34-C40	C10-C40 (Sum of total)	C6-C9	C10-C14
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

RPD Calculations

								TPH									
								C15-C28	C29-C36	+C10-C36 (Sum of total)	Aldrin	Dieldrin	Aldrin + Dieldrin	DDD	DDT	4,4'-DDE	DDT+DDE+DDD
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								50	50	50	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample										
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46838	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
RPD								0	0	0	0	0	0	0	0	0	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46838	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	
RPD								0	0	0	0	0	0	0	0		
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal											
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46847										
RPD																	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal											
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46854										
RPD																	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal											
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46854										
RPD																	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal											
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138011										
RPD																	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal											
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138011										
RPD																	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138001	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	
RPD								0	0	0	0	0	0	0	0	0	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
RPD								0	0	0	0	0	0	0	0	0	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001										
RPD																	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012318	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
RPD								0	0	0	0	0	0	0	0	0	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012318	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	
RPD								0	0	0	0	0	0	0	0	0	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal											
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012328										
RPD																	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal											
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012336										
RPD																	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal											
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012336										
RPD																	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218007	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	
RPD								0	0	0	0	0	0	0	0	0	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
RPD								0	0	0	0	0	0	0	0	0	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007										
RPD																	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal											
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218017										
RPD																	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal											
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218017										
RPD																	

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

RPD Calculations

TPH									
C15-C28	C29-C36	+C10-C36 (Sum of total)	Aldrin	Dieldrin	Aldrin + Dieldrin	DDD	DDT	4,4-DDE	DDT+DDE+DDD
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

RPD Calculations

								Organochlorine Pesticides									
								Endosulfan I	Endosulfan II	Endrin	Endrin ketone	Endrin aldehyde	Endosulfan sulphate	Chlordane	Chlordane (cis)	Chlordane (trans)	Hexachlorobenzene
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.03	0.03	0.05
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample										
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46838	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05
RPD								0	0	0	0	0	0	0			0
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.05	<0.05	<0.05	<0.05	<0.05	<0.1				<0.05
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46838	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05
RPD								0	0	0		0	0	0			0
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal											
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46847										
RPD																	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal											
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46854										
RPD																	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal											
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46854										
RPD																	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal											
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138011										
RPD																	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal											
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138011										
RPD																	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05
RPD								0	0	0		0	0	0	0	0	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1				<0.05
RPD								0	0	0		0	0	0			0
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05
RPD																	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.05	<0.05	<0.05	<0.05	<0.05	<0.1				<0.05
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012318	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1				<0.05
RPD								0	0	0		0	0	0			0
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.05	<0.05	<0.05	<0.05	<0.05	<0.1				<0.05
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012318	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05
RPD								0	0	0		0	0	0			0
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal											
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012328										
RPD																	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal											
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012336										
RPD																	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal											
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012336										
RPD																	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218007	<0.05	<0.05	<0.05	<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05
RPD								0	0	0		0	0	0	0	0	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1				<0.05
RPD								0	0	0		0	0	0			0
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007	<0.05	<0.05	<0.05	<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05
RPD																	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal											
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218017										
RPD																	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal											
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218017										
RPD																	

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

RPD Calculations

Organochlorine Pesticides									
Endosulfan I	Endosulfan II	Endrin	Endrin ketone	Endrin aldehyde	Endosulfan sulphate	Chlordane	Chlordane (cis)	Chlordane (trans)	Hexachlorobenzene
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

RPD Calculations

Heptachlor	Heptachlor epoxide	α -BHC	β -BHC	δ -BHC	γ -BHC (Lindane)	Methoxychlor	Toxaphene	Organochlorine pesticides EPAV/c	Other organochlorine pesticides EPAV/c
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

RPD Calculations

2-Chlorophenol	2,4-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol	4-chloro-3-methylphenol	Pentachlorophenol	2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4,6-Dinitro-2-methylphenol	Tetrachlorophenols
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

RPD Calculations

Phenols									
2,3,5-Tetrachlorophenol	Cresol Total	4,6-Dinitro-o-cyclohexyl phenol	Phenols (halogenated) EPAVic	Phenols (non-halogenated) EPAVic	2,4-Dimethylphenol	2-Methylphenol	2-Nitrophenol	2,4-Dinitrophenol	3&4-Methylphenol (m&p-cresol)
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

RPD Calculations

4-Nitrophenol	Dinoseb	Phenol	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	6:2 Fluorotelomer sulfonic
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/L

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

RPD Calculations

								acid (6:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	N-Ethyl perfluorooctane sulfonamide (NEFOSA)	N-ethyl-perfluorooctanesulfonamide acetic acid (NEFOSAA)	N-ethylperfluorooctanesulfonamide ethanol (NEFOSE)	N-Methyl perfluorooctane				
								mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L		
EQL								0.01	0.00001	0.005	0.00005	0.005	0.00005	0.01	0.00005	0.005	0.00005
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample										
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.01		<0.005		<0.005		<0.01		<0.005	
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46838	<0.01		<0.005		<0.005		<0.01		<0.005	
RPD								0		0		0		0		0	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.01		<0.005		<0.005		<0.01		<0.005	
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46838	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005
RPD								0		0		0		0		0	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46847	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD								0		0		0		0		0	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46854	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD								0		0		0		0		0	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46854	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005	
RPD								0		0		0		0		0	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138011	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005	
RPD								0		0		0		0		0	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138011	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD								0		0		0		0		0	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138001	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005
RPD								0	0	0	0	0	0	0	0	0	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001	<0.01		<0.005		<0.005		<0.01		<0.005	
RPD								0		0		0		0		0	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD								0		0		0		0		0	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.01		<0.005		<0.005		<0.01		<0.005	
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012318	<0.01		<0.005		<0.005		<0.01		<0.005	
RPD								0		0		0		0		0	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.01		<0.005		<0.005		<0.01		<0.005	
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012318	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005
RPD								0		0		0		0		0	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012328	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD								0		0		0		0		0	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012336	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD								0		0		0		0		0	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012336	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005	
RPD								0		0		0		0		0	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218007	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005
RPD								0	0	0	0	0	0	0	0	0	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007	<0.01		<0.005		<0.005		<0.01		<0.005	
RPD								0		0		0		0		0	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD								0		0		0		0		0	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218017	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005	
RPD								0		0		0		0		0	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005	
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218017	<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD								0		0		0		0		0	

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

RPD Calculations

acid (6:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	N-Ethyl perfluorooctane sulfonamide (NEFOSA)	N-ethyl-perfluorooctanesulfonamid oacetic acid (NEFOSAA)	N-ethylperfluorooctanesulfonamidoethanol (NEFOSE)	N-Methyl perfluorooctane
mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

RPD Calculations

								Perfluorobutanoic acid (PFBA)	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanoic acid							
								Perfluorooctanoic acid (PFOS)	Perfluorooctanesulfonic acid (PFOSAA)	Perfluorooctane sulfonamide (NMeFOSA)							
								mg/L	mg/kg	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
								0.00005	0.005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
								0	0	0	0	0	0	0	0	0	0
								<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
								<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample	Perfluorobutanoic acid (PFBA)	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanoic acid							
EQL								0.005	0.00005	0.01							
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.005	<0.01	<0.005							
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46838	<0.005	<0.01	<0.005							
RPD								0	0	0							
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.005	<0.01	<0.005							
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46838	<0.0050	<0.00005	<0.0100							
RPD								0	0	0							
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.00005	<0.00005	<0.00005							
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46847	<0.00005	<0.00005	<0.00005							
RPD								0	0	0							
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.00005	<0.00005	<0.00005							
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46854	<0.00005	<0.00005	<0.00005							
RPD								0	0	0							
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.00005	<0.00005	<0.00005							
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46854	<0.00005	<0.00005	<0.0001							
RPD								0	0	0							
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.00005	<0.00005	<0.00005							
C07.01	SX_OB_20220322_15_57_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138011	<0.00005	<0.00005	<0.0001							
RPD								0	0	0							
C07.01	SX_OB_20220322_15_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.00005	<0.00005	<0.0001							
C07.01	SX_OB_20220322_15_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138011	<0.00005	<0.00005	<0.00005							
RPD								0	0	0							
C07.01	SX_OB_20220322_15_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.0050	<0.00005	<0.0100							
C07.01	SX_OB_20220322_15_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138001	<0.0050	<0.00005	<0.0100							
RPD								0	0	0							
C07.01	SX_OB_20220322_15_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.0050	<0.00005	<0.0100							
C07.01	SX_OB_20220322_15_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001	<0.005	<0.01	<0.005							
RPD								0	0	0							
C07.01	SX_OB_20220322_15_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.0050	<0.00005	<0.0100							
C07.01	SX_OB_20220322_15_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001	<0.0050	<0.00005	<0.0100							
RPD								0	0	0							
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.005	<0.01	<0.005							
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012318	<0.005	<0.01	<0.005							
RPD								0	0	0							
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.005	<0.01	<0.005							
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012318	<0.0050	<0.00005	<0.0100							
RPD								0	0	0							
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.00005	<0.00005	<0.00005							
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012328	<0.00005	<0.00005	<0.00005							
RPD								0	0	0							
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.00005	<0.00005	<0.00005							
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012336	<0.00005	<0.00005	<0.00005							
RPD								0	0	0							
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.00005	<0.00005	<0.00005							
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012336	<0.00005	<0.00005	<0.0001							
RPD								0	0	0							
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.0050	<0.00005	<0.0100							
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218007	<0.0050	<0.00005	<0.0100							
RPD								0	0	0							
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.0050	<0.00005	<0.0100							
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007	<0.005	<0.01	<0.005							
RPD								0	0	0							
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.0050	<0.00005	<0.0100							
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007	<0.0050	<0.00005	<0.0100							
RPD								0	0	0							
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.00005	<0.00005	<0.0001							
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218017	<0.00005	<0.00005	<0.0001							
RPD								0	0	0							
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.00005	<0.00005	<0.0001							
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218017	<0.00005	<0.00005	<0.00005							
RPD								0	0	0							

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

RPD Calculations

sulfonamide (NMeFOSA)	N-methylperfluorooctane sulfonamidoacetic acid (NMeFOSAA)	N-Methylperfluorooctanesulfonamidoethanol (NMeFOSE)	Perfluorobutanoic acid (PFBA)	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanoic acid
mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

RPD Calculations

								PFOS/PFOA							
								PFDA	Perfluorododecanoic acid (PFDoDA)	Perfluorodecane sulfonic acid (PFDS)	Perfluorooctanoic acid (PFHpA)	Perfluorooctane sulfonic acid (PFHPS)	Perfluorohexanoic acid		
								mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
EQL								0.005	0.00001	0.005	0.00001	0.005	0.00001	0.005	0.00001
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample								
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.005		<0.005		<0.005		<0.005	
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46838	<0.005		<0.005		<0.005		<0.005	
RPD								0		0		0		0	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.005		<0.005		<0.005		<0.005	
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46838	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
RPD								0		0		0		0	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46847		<0.00001		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46854		<0.00001		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46854		<0.00002		<0.00002		<0.00002		<0.00002
RPD								0		0		0		0	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal			<0.00002		<0.00002		<0.00002		<0.00002
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138011		<0.00002		<0.00002		<0.00002		<0.00002
RPD								0		0		0		0	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal			<0.00002		<0.00002		<0.00002		<0.00002
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138011		<0.00001		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138001	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
RPD								0		0		0		0	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001	<0.005	<0.005		<0.005	<0.005	<0.005		
RPD								0		0		0		0	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001		<0.00001		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.005		<0.005		<0.005		<0.005	
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012318	<0.005		<0.005		<0.005		<0.005	
RPD								0		0		0		0	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.005		<0.005		<0.005		<0.005	
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012318	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
RPD								0		0		0		0	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012328		<0.00001		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012336		<0.00001		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012336		<0.00002		<0.00002		<0.00002		<0.00002
RPD								0		0		0		0	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218007	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
RPD								0		0		0		0	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007	<0.005		<0.005		<0.005		<0.005	
RPD								0		0		0		0	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007		<0.00001		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal			<0.00002		<0.00002		<0.00002		<0.00002
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218017		<0.00002		<0.00002		<0.00002		<0.00002
RPD								0		0		0		0	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal			<0.00002		<0.00002		<0.00002		<0.00002
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218017		<0.00001		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0	

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

RPD Calculations

PFDA	PFOS/PFOA									
	Perfluorododecanoic acid (PFDoDA)	Perfluorodecanesulfonic acid (PFDS)	Perfluoroheptanoic acid (PFHpA)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorohexanoic acid					
mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/L

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

RPD Calculations

								(PFHxA)	Perfluorononanoic acid (PFNA)	Perfluorononanesulfonic acid (PFNS)(trace)	Perfluorooctanoic acid (PFOA)	Perfluorooctane sulfonamide (PFOSA)	Perfluoropentanoic acid			
								mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	
EQL								0.005	0.00001	0.005	0.00001	0.005	0.00001	0.005	0.00001	
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample									
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46838	<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46838	<0.0050	<0.00002	<0.0050		<0.00001	<0.0050	<0.00005	<0.0050	<0.00002
RPD								0		0		0		0		0
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46847		<0.00001		<0.00001		<0.00001		<0.00005	
RPD								0		0		0		0		0
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46854		<0.00001		<0.00001		<0.00001		<0.00005	
RPD								0		0		0		0		0
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46854		<0.00002		<0.00001		<0.00001		<0.00005	
RPD								0		0		0		0		0
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal			<0.00002			<0.00001		<0.00005		<0.00002
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138011		<0.00002			<0.00001		<0.00005		<0.00002
RPD								0		0		0		0		0
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal			<0.00002			<0.00001		<0.00005		<0.00002
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138011		<0.00001		<0.00001		<0.00001		<0.00005	
RPD								0		0		0		0		0
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050		<0.00001	<0.0050	<0.00005	<0.0050	<0.00002
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138001	<0.0050	<0.00002	<0.0050		<0.00001	<0.0050	<0.00005	<0.0050	<0.00002
RPD								0	0	0		0	0	0	0	0
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050		<0.00001	<0.0050	<0.00005	<0.0050	<0.00002
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001	<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050		<0.00001	<0.0050	<0.00005	<0.0050	<0.00002
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001		<0.00001		<0.00001		<0.00001		<0.00005	
RPD								0		0		0		0		0
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012318	<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012318	<0.0050	<0.00002	<0.0050		<0.00001	<0.0050	<0.00005	<0.0050	<0.00002
RPD								0		0		0		0		0
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012328		<0.00001		<0.00001		<0.00001		<0.00005	
RPD								0		0		0		0		0
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012336		<0.00001		<0.00001		<0.00001		<0.00005	
RPD								0		0		0		0		0
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00005	
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012336		<0.00002			<0.00001		<0.00005		<0.00002
RPD								0		0		0		0		0
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050		<0.00001	<0.0050	<0.00005	<0.0050	<0.00002
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218007	<0.0050	<0.00002	<0.0050		<0.00001	<0.0050	<0.00005	<0.0050	<0.00002
RPD								0	0	0		0	0	0	0	0
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050		<0.00001	<0.0050	<0.00005	<0.0050	<0.00002
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007	<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050		<0.00001	<0.0050	<0.00005	<0.0050	<0.00002
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007		<0.00001		<0.00001		<0.00001		<0.00005	
RPD								0		0		0		0		0
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal			<0.00002			<0.00001		<0.00005		<0.00002
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218017		<0.00002			<0.00001		<0.00005		<0.00002
RPD								0		0		0		0		0
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal			<0.00002			<0.00001		<0.00005		<0.00002
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218017		<0.00001		<0.00001		<0.00001		<0.00005	
RPD								0		0		0		0		0

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

RPD Calculations

(PFHxA)	Perfluorononanoic acid (PFNA)	Perfluorononanesulfonic acid (PFNS)(trace)	Perfluorooctanoic acid (PFOA)	Perfluorooctane sulfonamide (PFOSA)	Perfluoropentanoic acid
mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

RPD Calculations

(PFPeA)	Perfluoropentane sulfonic acid (PFPeS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid
mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL)

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

RPD Calculations

								(PFUnDA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Sum of PFHxS and PFOS	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS		
								mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
EQL								0.005	0.00001	0.005	0.00001	0.005	0.00001	0.005	0.00001
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample								
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.005		<0.005		<0.005		<0.005	
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46838	<0.005		<0.005		<0.005		<0.005	
RPD								0		0		0		0	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.005		<0.005		<0.005		<0.005	
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46838	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	
RPD								0		0		0		0	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal			<0.00001	<0.00001		<0.00001		<0.00001	
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46847		<0.00001	<0.00001		<0.00001		<0.00001	
RPD								0		0		0		0	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal			<0.00001	<0.00001		<0.00001		<0.00001	
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46854		<0.00001	<0.00001		<0.00001		<0.00001	
RPD								0		0		0		0	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal			<0.00001	<0.00001		<0.00001		<0.00001	
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46854		<0.00001	<0.00001		<0.00001		<0.00001	
RPD								0		0		0		0	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal			<0.00001	<0.00001		<0.00001		<0.00001	
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138011		<0.00001	<0.00001		<0.00001		<0.00001	
RPD								0		0		0		0	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal			<0.00001	<0.00001		<0.00001		<0.00001	
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138011		<0.00001	<0.00001		<0.00001		<0.00001	
RPD								0		0		0		0	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	
RPD								0		0		0		0	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001	<0.005		<0.005		<0.005		<0.005	
RPD								0		0		0		0	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal		<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001		<0.00001	<0.00001		<0.00001		<0.00001	
RPD								0		0		0		0	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.005		<0.005		<0.005		<0.005	
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012318	<0.005		<0.005		<0.005		<0.005	
RPD								0		0		0		0	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.005		<0.005		<0.005		<0.005	
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012318	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	
RPD								0		0		0		0	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal			<0.00001	<0.00001		<0.00001		<0.00001	
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012328		<0.00001	<0.00001		<0.00001		<0.00001	
RPD								0		0		0		0	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal			<0.00001	<0.00001		<0.00001		<0.00001	
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012336		<0.00001	<0.00001		<0.00001		<0.00001	
RPD								0		0		0		0	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal			<0.00001	<0.00001		<0.00001		<0.00001	
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012336		<0.00001	<0.00001		<0.00001		<0.00001	
RPD								0		0		0		0	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218007	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	
RPD								0		0		0		0	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007	<0.005		<0.005		<0.005		<0.005	
RPD								0		0		0		0	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal		<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007		<0.00001	<0.00001		<0.00001		<0.00001	
RPD								0		0		0		0	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal			<0.00001	<0.00001		<0.00001		<0.00001	
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218017		<0.00001	<0.00001		<0.00001		<0.00001	
RPD								0		0		0		0	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal			<0.00001	<0.00001		<0.00001		<0.00001	
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218017		<0.00001	<0.00001		<0.00001		<0.00001	
RPD								0		0		0		0	

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

RPD Calculations

(PFUnDA)	Perfluorooctanesulfonic acid (PFOS)		Perfluorohexane sulfonic acid (PFHxS)		Sum of PFHxS and PFOS		Sum of US EPA PFAS (PFOS + PFOA)*		Sum of enHealth PFAS
	mg/kg	mg/L	mg/kg	mg/L	mg/L	mg/kg	mg/L	mg/kg	mg/L

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

RPD Calculations

								(PFHxS + PFOS + PFOA)*	Sum of PFAS	Sum of PFAS	1,1-dichloroethane	1,1-dichloroethene	1,1,2-trichloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	Bromochloromethane
								mg/kg	mg/L	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								0.005	0.0001	0.05	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample										
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.005		<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46838	<0.005		<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								0		0	0	0	0	0	0	0	0
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.005		<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46838		<0.00010	<0.0500		<0.50		<0.50			
RPD										0		0		0			
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal			<0.0001								
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46847		<0.0001								
RPD										0							
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal			<0.0001								
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46854		<0.0001								
RPD										0							
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal			<0.0001								
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46854		<0.00010								
RPD										0							
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal			<0.00010								
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138011		<0.00010								
RPD										0							
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal			<0.00010								
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138011		<0.0001								
RPD										0							
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal			<0.00010	<0.0500		<0.50		<0.50			
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138001		<0.00010	<0.0500		<0.50		<0.50			
RPD										0		0		0			
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal			<0.00010	<0.0500		<0.50		<0.50			
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001	<0.005		<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD										0		0		0			
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal			<0.00010	<0.0500		<0.50		<0.50			
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001		<0.0001								
RPD										0							
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.005		<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012318	<0.005		<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD										0		0		0		0	0
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.005		<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012318		<0.00010	<0.0500		<0.50		<0.50			
RPD										0		0		0			
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal			<0.0001								
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012328		<0.0001								
RPD										0							
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal			<0.0001								
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012336		<0.0001								
RPD										0							
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal			<0.0001								
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012336		<0.00010								
RPD										0							
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal			<0.00010	<0.0500		<0.50		<0.50			
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218007		<0.00010	<0.0500		<0.50		<0.50			
RPD										0		0		0			
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal			<0.00010	<0.0500		<0.50		<0.50			
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007	<0.005		<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD										0		0		0			
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal			<0.00010	<0.0500		<0.50		<0.50			
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007		<0.0001								
RPD										0							
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal			<0.00010								
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218017		<0.00010								
RPD										0							
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal			<0.00010								
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218017		<0.0001								
RPD										0							

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

RPD Calculations

(PFHxS + PFOS + PFOA)*	Sum of PFAS		1,1-dichloroethane	1,1-dichloroethene	1,2,3-trichloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	Bromochloromethane
mg/kg	mg/L	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

RPD Calculations

Chlorinated Hydrocarbons									
1,1,1,2-tetrachloroethane	Bromodichloromethane	1,1,1-trichloroethane	Chloroform	1,1,2-tetrachloroethane	Chloromethane	cis-1,3-dichloropropene	Dibromomethane	Dichloromethane	Hexachlorobutadiene
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

RPD Calculations

Other chlorinated hydrocarbons EPAVic	Trichloroethene	Chlorinated hydrocarbons EPAVic	cis-1,2-dichloroethene	1,1,2-trichloroethane	trans-1,3-dichloropropene	Vinyl chloride	Bromoform	Carbon tetrachloride	Chlorodibromomethane
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

RPD Calculations

			NA			PC			
Chloroethane	trans-1,2-dichloroethene	Tetrachloroethene	Sum of WA DWER PFAS (n=10)*		Moisture Content	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254
mg/kg	mg/kg	mg/kg	UG/KG	µg/L	%	mg/kg	mg/kg	mg/kg	mg/kg

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

RPD Calculations

Bs				Inorganics					
Arochlor 1221	Arochlor 1260	Arochlor 1016	PCBs (Sum of total)	pH (after HCl)	pH (Final)	pH (Initial)	pH of Leaching Fluid	pH (aqueous extract)	Fluoride
mg/kg	mg/kg	mg/kg	mg/kg	-	-	-	-	-	mg/kg

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

RPD Calculations

		Halogenated Benzenes							
Moisture Content (dried @ 103°C)	Cyanide Total	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Bromobenzene	4-chlorotoluene	Chlorobenzene	Iodomethane
%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

RPD Calculations

								Halogenated Hydrocarbons				MAH					
								Bromomethane	1,2-dibromoethane	Dichlorodifluoromethane	Trichlorofluoromethane	Total MAH	Monocyclic aromatic hydrocarbons EPAVic	1,3,5-trimethylbenzene	Styrene	Isopropylbenzene	1,2,4-trimethylbenzene
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample										
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46838	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0	0		0	0	0	0
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46838						<0.5	<0.5			
RPD														0			
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal											
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46847										
RPD																	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal											
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46854										
RPD																	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal											
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46854										
RPD																	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal											
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138011										
RPD																	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal											
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138011										
RPD																	
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal							<0.5	<0.5			
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138001						<0.5	<0.5			
RPD													0	0			
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal							<0.5	<0.5			
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5
RPD														0			
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal							<0.5	<0.5			
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001										
RPD																	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012318	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5
RPD								0	0	0	0	0		0	0	0	0
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012318						<0.5	<0.5			
RPD														0			
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal											
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012328										
RPD																	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal											
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012336										
RPD																	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal											
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012336										
RPD																	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal							<0.5	<0.5			
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218007						<0.5	<0.5			
RPD													0	0			
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal							<0.5	<0.5			
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5
RPD														0			
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal							<0.5	<0.5			
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007										
RPD																	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal											
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218017										
RPD																	
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal											
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218017										
RPD																	

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

RPD Calculations

Halogenated Hydrocarbons				MAH					
Bromomethane	1,2-dibromoethane	Dichlorodifluoromethane	Trichlorofluoromethane	Total MAH	Monocyclic aromatic hydrocarbons EPAVIC	1,3,5-trimethylbenzene	Styrene	Isopropylbenzene	1,2,4-trimethylbenzene
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

RPD Calculations

Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample	Solvents					SPOCAS
								4-Methyl-2-pentanone	Acetone	Allyl chloride	Carbon disulfide	Methyl Ethyl Ketone	pH (CaCl2)
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-
EQL								0.5	0.5	0.5	0.5	0.5	0.1
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46838	<0.5	<0.5	<0.5	<0.5	<0.5	
RPD								0	0	0	0	0	
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46838						8.8
RPD													
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal							
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46847						
RPD													
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal							
C07.01	SX_OB_20220322_15_55_SS_Du	22/03/2022		873586	MGT	Field_D	M22-Ma46854						
RPD													
C07.01	SX_OB_20220322_15_54_SS_Pri	22/03/2022		873586	MGT	Normal							
C07.01	SX_OB_20220322_15_56_SS_Tri	22/03/2022		EM2205138	ALSE-Melbourne	Interlab_D	M22-Ma46854						
RPD													
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal							
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138011						
RPD													
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal							
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138011						
RPD													
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal							8.7
C07.01	SX_OB_20220322_07_58_SS_Du	22/03/2022		EM2205138	ALSE-Melbourne	Field_D	EM2205138001						8.6
RPD													1
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal							8.7
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001	<0.5	<0.5	<0.5	<0.5	<0.5	
RPD													
C07.01	SX_OB_20220322_07_57_SS_Pri	22/03/2022		EM2205138	ALSE-Melbourne	Normal							8.7
C07.01	SX_OB_20220322_07_59_SS_Tri	22/03/2022		873586	MGT	Interlab_D	EM2205138001						
RPD													
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012318	<0.5	<0.5	<0.5	<0.5	<0.5	
RPD								0	0	0	0	0	
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012318						8.2
RPD													
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal							
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012328						
RPD													
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal							
C07.01	SX_OB_20220406_13_41_SS_Du	6/04/2022		877800	MGT	Field_D	M22-Ap0012336						
RPD													
C07.01	SX_OB_20220406_13_39_SS_Pri	6/04/2022		877800	MGT	Normal							
C07.01	SX_OB_20220406_13_42_SS_Tri	6/04/2022		EM2206218	ALSE-Melbourne	Interlab_D	M22-Ap0012336						
RPD													
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal							7.8
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218007						7.9
RPD													1
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal							7.8
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007	<0.5	<0.5	<0.5	<0.5	<0.5	
RPD													
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal							7.8
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218007						
RPD													
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal							
C07.01	SX_OB_20220406_13_53_SS_Du	6/04/2022		EM2206218	ALSE-Melbourne	Field_D	EM2206218017						
RPD													
C07.01	SX_OB_20220406_13_52_SS_Pri	6/04/2022		EM2206218	ALSE-Melbourne	Normal							
C07.01	SX_OB_20220406_13_54_SS_Tri	6/04/2022		877800	MGT	Interlab_D	EM2206218017						
RPD													

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

RPD Calculations

Solvents					SPOCAS
4-Methyl-2-pentanone	Acetone	Allyl chloride	Carbon disulfide	Methyl Ethyl Ketone	pH (CaCl2)
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 81 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	C07.0120220412101909_02	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001 01</u>
-----------------------------------	-------------------------	---

ATTACHMENT B: 95% UCL AVE CALCULATIONS

	A	B	C	D	E	F	G	H	I	J	K	L
1	UCL Statistics for Data Sets with Non-Detects											
2												
3	User Selected Options											
4	Date/Time of Computation			ProUCL 5.112/04/2022 12:48:45 PM								
5	From File			WorkSheet.xls								
6	Full Precision			OFF								
7	Confidence Coefficient			95%								
8	Number of Bootstrap Operations			2000								
9												
10												
11	Arsenic											
12												
13	General Statistics											
14	Total Number of Observations				24		Number of Distinct Observations				18	
15							Number of Missing Observations				8	
16	Minimum				18		Mean				32	
17	Maximum				59		Median				26.5	
18	SD				11.16		Std. Error of Mean				2.277	
19	Coefficient of Variation				0.349		Skewness				0.848	
20												
21	Normal GOF Test											
22	Shapiro Wilk Test Statistic				0.909		Shapiro Wilk GOF Test					
23	5% Shapiro Wilk Critical Value				0.916		Data Not Normal at 5% Significance Level					
24	Lilliefors Test Statistic				0.215		Lilliefors GOF Test					
25	5% Lilliefors Critical Value				0.177		Data Not Normal at 5% Significance Level					
26	Data Not Normal at 5% Significance Level											
27												
28	Assuming Normal Distribution											
29	95% Normal UCL						95% UCLs (Adjusted for Skewness)					
30	95% Student's-t UCL				35.9		95% Adjusted-CLT UCL (Chen-1995)				36.17	
31							95% Modified-t UCL (Johnson-1978)				35.97	
32												
33	Gamma GOF Test											
34	A-D Test Statistic				0.621		Anderson-Darling Gamma GOF Test					
35	5% A-D Critical Value				0.745		Detected data appear Gamma Distributed at 5% Significance Level					
36	K-S Test Statistic				0.195		Kolmogorov-Smirnov Gamma GOF Test					
37	5% K-S Critical Value				0.178		Data Not Gamma Distributed at 5% Significance Level					
38	Detected data follow Appr. Gamma Distribution at 5% Significance Level											
39												
40	Gamma Statistics											
41	k hat (MLE)				9.357		k star (bias corrected MLE)				8.215	
42	Theta hat (MLE)				3.42		Theta star (bias corrected MLE)				3.895	
43	nu hat (MLE)				449.1		nu star (bias corrected)				394.3	
44	MLE Mean (bias corrected)				32		MLE Sd (bias corrected)				11.16	
45							Approximate Chi Square Value (0.05)				349.3	
46	Adjusted Level of Significance				0.0392		Adjusted Chi Square Value				346.3	
47												
48	Assuming Gamma Distribution											
49	95% Approximate Gamma UCL (use when n>=50)				36.13		95% Adjusted Gamma UCL (use when n<50)				36.44	
50												
51	Lognormal GOF Test											
52	Shapiro Wilk Test Statistic				0.951		Shapiro Wilk Lognormal GOF Test					
53	5% Shapiro Wilk Critical Value				0.916		Data appear Lognormal at 5% Significance Level					
54	Lilliefors Test Statistic				0.178		Lilliefors Lognormal GOF Test					
55	5% Lilliefors Critical Value				0.177		Data Not Lognormal at 5% Significance Level					
56	Data appear Approximate Lognormal at 5% Significance Level											

	A	B	C	D	E	F	G	H	I	J	K	L
57												
58	Lognormal Statistics											
59	Minimum of Logged Data				2.89		Mean of logged Data				3.411	
60	Maximum of Logged Data				4.078		SD of logged Data				0.332	
61												
62	Assuming Lognormal Distribution											
63	95% H-UCL				36.4		90% Chebyshev (MVUE) UCL				38.57	
64	95% Chebyshev (MVUE) UCL				41.57		97.5% Chebyshev (MVUE) UCL				45.74	
65	99% Chebyshev (MVUE) UCL				53.91							
66												
67	Nonparametric Distribution Free UCL Statistics											
68	Data appear to follow a Discernible Distribution at 5% Significance Level											
69												
70	Nonparametric Distribution Free UCLs											
71	95% CLT UCL				35.75		95% Jackknife UCL				35.9	
72	95% Standard Bootstrap UCL				35.75		95% Bootstrap-t UCL				36.86	
73	95% Hall's Bootstrap UCL				35.97		95% Percentile Bootstrap UCL				35.58	
74	95% BCA Bootstrap UCL				36.04							
75	90% Chebyshev(Mean, Sd) UCL				38.83		95% Chebyshev(Mean, Sd) UCL				41.93	
76	97.5% Chebyshev(Mean, Sd) UCL				46.22		99% Chebyshev(Mean, Sd) UCL				54.66	
77												
78	Suggested UCL to Use											
79	95% Adjusted Gamma UCL				36.44							
80												
81	When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test											
82	When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL											
83												
84	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
85	Recommendations are based upon data size, data distribution, and skewness.											
86	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
87	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
88												
89												
90	Nickel											
91												
92	General Statistics											
93	Total Number of Observations				24		Number of Distinct Observations				17	
94							Number of Missing Observations				8	
95	Minimum				143		Mean				201.9	
96	Maximum				300		Median				190	
97	SD				47.37		Std. Error of Mean				9.67	
98	Coefficient of Variation				0.235		Skewness				0.475	
99												
100	Normal GOF Test											
101	Shapiro Wilk Test Statistic				0.921		Shapiro Wilk GOF Test					
102	5% Shapiro Wilk Critical Value				0.916		Data appear Normal at 5% Significance Level					
103	Lilliefors Test Statistic				0.18		Lilliefors GOF Test					
104	5% Lilliefors Critical Value				0.177		Data Not Normal at 5% Significance Level					
105	Data appear Approximate Normal at 5% Significance Level											
106												
107	Assuming Normal Distribution											
108	95% Normal UCL						95% UCLs (Adjusted for Skewness)					
109	95% Student's-t UCL				218.5		95% Adjusted-CLT UCL (Chen-1995)				218.8	
110							95% Modified-t UCL (Johnson-1978)				218.6	

	A	B	C	D	E	F	G	H	I	J	K	L
111												
112	Gamma GOF Test											
113	A-D Test Statistic				0.651		Anderson-Darling Gamma GOF Test					
114	5% A-D Critical Value				0.742		Detected data appear Gamma Distributed at 5% Significance Level					
115	K-S Test Statistic				0.179		Kolmogorov-Smirnov Gamma GOF Test					
116	5% K-S Critical Value				0.178		Data Not Gamma Distributed at 5% Significance Level					
117	Detected data follow Appr. Gamma Distribution at 5% Significance Level											
118												
119	Gamma Statistics											
120	k hat (MLE)				19.55		k star (bias corrected MLE)				17.13	
121	Theta hat (MLE)				10.33		Theta star (bias corrected MLE)				11.78	
122	nu hat (MLE)				938.4		nu star (bias corrected)				822.5	
123	MLE Mean (bias corrected)				201.9		MLE Sd (bias corrected)				48.78	
124							Approximate Chi Square Value (0.05)				756.9	
125	Adjusted Level of Significance				0.0392		Adjusted Chi Square Value				752.5	
126												
127	Assuming Gamma Distribution											
128	95% Approximate Gamma UCL (use when n>=50))				219.4		95% Adjusted Gamma UCL (use when n<50)				220.7	
129												
130	Lognormal GOF Test											
131	Shapiro Wilk Test Statistic				0.93		Shapiro Wilk Lognormal GOF Test					
132	5% Shapiro Wilk Critical Value				0.916		Data appear Lognormal at 5% Significance Level					
133	Lilliefors Test Statistic				0.17		Lilliefors Lognormal GOF Test					
134	5% Lilliefors Critical Value				0.177		Data appear Lognormal at 5% Significance Level					
135	Data appear Lognormal at 5% Significance Level											
136												
137	Lognormal Statistics											
138	Minimum of Logged Data				4.963		Mean of logged Data				5.282	
139	Maximum of Logged Data				5.704		SD of logged Data				0.231	
140												
141	Assuming Lognormal Distribution											
142	95% H-UCL		220.2		90% Chebyshev (MVUE) UCL				230.7			
143	95% Chebyshev (MVUE) UCL		243.7		97.5% Chebyshev (MVUE) UCL				261.8			
144	99% Chebyshev (MVUE) UCL		297.4									
145												
146	Nonparametric Distribution Free UCL Statistics											
147	Data appear to follow a Discernible Distribution at 5% Significance Level											
148												
149	Nonparametric Distribution Free UCLs											
150	95% CLT UCL				217.8		95% Jackknife UCL				218.5	
151	95% Standard Bootstrap UCL				217.8		95% Bootstrap-t UCL				220.1	
152	95% Hall's Bootstrap UCL				217.8		95% Percentile Bootstrap UCL				218.1	
153	95% BCA Bootstrap UCL				217.5							
154	90% Chebyshev(Mean, Sd) UCL				230.9		95% Chebyshev(Mean, Sd) UCL				244.1	
155	97.5% Chebyshev(Mean, Sd) UCL				262.3		99% Chebyshev(Mean, Sd) UCL				298.1	
156												
157	Suggested UCL to Use											
158	95% Student's-t UCL				218.5							
159												
160	When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test											
161	When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL											
162												
163	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
164	Recommendations are based upon data size, data distribution, and skewness.											
165	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
166	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	C07.0120220412101909_02	This report is attached as part of a WCR form referencing <u>WGT-302-000-WKN-CJH-105-SWI-0001 01</u>
-----------------------------------	-------------------------	---

ATTACHMENT C: LABORATORY CERTIFICATES



CHAIN OF CUSTODY RECORD

Caroline | Environment Testing Australia (08 9251 9600)

Sydney Laboratory
Unit F3 Bldg F 16 Mars Road Lane Cove West NSW 2058
02 9900 9400 EnviroSampleNSW@eurofins.com

Brisbane Laboratory
Unit 1 21 Smallwood Place Murrumbidgee QLD 4172
07 3902 4600 EnviroSampleQLD@eurofins.com

Perth Laboratory
Unit 2 91 Leach Highway Kevdale WA 6105
08 9251 9600 EnviroSampleWA@eurofins.com

Melbourne Laboratory
6 Monterey Road Dandenong South VIC 3175
03 8564 5000 EnviroSampleVic@eurofins.com

Company	AGON Environmental - Tunnel Spoil Testing	Project No	JC0927	Project Manager	Craig Trimbur	Sampler(s)	HK - EP Risk	
Address	Unit H76, 63-85 Turner St, Port Melbourne VIC 3207	Project Name	WGTP-Tunnel Ref:20220323051205-Eurofin-12	EDD Format	ESdat, EOutS etc	Handed over by	E-S	
Contact Name	Craig Trimbur David Lawson	Analyses <small>Where metals are requested, please specify "Total" or "Filtered" - SUITE code must be used to attract SUITE pricing</small> Spoil Sample Preparation Suite WGTP-P-Cr-Rb/Pb/PAH/Phenols/OCF/PCB/OCV/UVI/Chloride/ Metals (As, Cd, Cr, Cu, Ni, Pb, Hg, Ag, Sn, Mo, Se, Zn)/Cr6+ CN/ Total Fluoride/ pH PFAS Extended Suite - 0.1- 5ug/kg ASLP PH 5 - PFAS 0.01-0.05 ug/l ASLP Reagent - PFAS 0.01-0.05ug/l					Email for Invoice	finance@agonenviro.com.au LabReports.TST@agonenviro.com.au
Phone No	+61 400 826 907 (Craig) +61 490 411 004 (David)						Email for Results	LabReports.TST@agonenviro.com.au agonenvironmental@esdat.com.au motherublabresults1@wgtp.com.au Amrit.Kaur@agile-analytics.com.au
Special Directions	Please provide an interim lab report if finalised report has not been provided by 14 days from sample receipt. Please provide eSRN along with oter sample receipt documentation.						Containers <small>Change container type & size if necessary</small>	
Purchase Order							Required Turnaround Time (TAT) <small>Default will be 5 days if not ticked</small> <input type="checkbox"/> Overnight (reporting by 9am) *Surcharge will apply <input type="checkbox"/> Same day <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 3 days <input checked="" type="checkbox"/> 5 days (Standard) <input type="checkbox"/> Other ()	
Quote ID No	Agon WGTP TST						500mL Plastic 250mL Plastic 125mL Plastic 200mL Amber Glass 40mL VOA vial 500mL PFAS Bottle Jar (Glass or HDPE) Other (Asbestos AS4884, WA Guidelines)	

No	Client Sample ID	Sampled Date/Time <small>dd/mm/yyyy hh:mm</small>	Matrix <small>Solid (S) Water (W)</small>	Analyses					Sample Comments / Dangerous Goods Hazard Warning
1	SX_OB_20220322_07_59_SS_Triplicate_EUF	22/03/22	S	X	X	X	X	X	
2	SX_OB_20220322_08_04_SS_Primary_EUF	22/03/22	S	X	X	X	X	X	
3	SX_OB_20220322_11_59_SS_Primary_EUF	22/03/22	S	X	X	X	X	X	
4	SX_OB_20220322_15_54_SS_Primary_EUF	22/03/22	S	X	X	X	X	X	
5	SX_OB_20220322_15_55_SS_Duplicate_EUF	22/03/22	S	X	X	X	X	X	
6	SX_OB_20220322_16_11_SR_Rinseate_EUF	22/03/22	W			X			
7	SX_OB_20220322_16_13_SB_Blank_EUF	22/03/22	W			X			
8	SX_OB_20220323_20_06_SS_Primary_EUF	23/03/22	S	X	X	X	X	X	
9	SX_OB_20220323_03_59_SS_Primary_EUF	23/03/22	S	X	X	X	X	X	
10									
11									
12									
13									
Total Counts				7	7	9	7	7	9

Method of Shipment	<input checked="" type="checkbox"/> Courier (#) <input type="checkbox"/> Hand Delivered <input type="checkbox"/> Postal	Name	Emma Strong	Signature		Date	23/03/22	Time	11:11am	
Laboratory Use Only	Received By	SYD BNE MEL PER ADL NTL DRW	Signature		Date	23/03/22	Time	10m	Temperature	15.9°C
	Received By	SYD BNE MEL PER ADL NTL DRW	Signature		Date		Time		Report No	

80
17.1
-0.2
110.9°C

873586
Jalke

#AU_CAU001_EnviroSampleVic

From: Emma Strong <emma.strong@eprisk.com.au>
Sent: Wednesday, 23 March 2022 2:08 PM
To: Michael Cassidy
Cc: #AU_CAU001_EnviroSampleVic
Subject: RE: WGTP TST Sample Delivery
Attachments: 20220323051205-Eurofins-12 Solid_00.xlsx

CAUTION: EXTERNAL EMAIL - Sent from an email domain that is not formally trusted by Eurofins.

Do not click on links or open attachments unless you recognise the sender and are certain that the content is safe.

Here you go, sorry about that!

Please let me know if this is the exact sample?

Cheers,
Emma

Emma Strong
Environmental Scientist
M 0402 510 610 | E emma.strong@eprisk.com.au
EP Risk Management Pty Ltd

873586
L. Ryan

From: Michael Cassidy <MichaelCassidy@eurofins.com>
Sent: Wednesday, 23 March 2022 2:07 PM
To: Emma Strong <emma.strong@eprisk.com.au>
Cc: #AU_CAU001_EnviroSampleVic <EnviroSampleVic@eurofins.com>
Subject: RE: WGTP TST Sample Delivery

No problem Emma,

Thanks for clarifying,

@Canh, please update the COC once Emma sends through,

Thanks,

Kind Regards,

Michael Cassidy

Phone: 8564 5940
Mobile: 0498 700 069
Email : MichaelCassidy@eurofins.com

From: Emma Strong <emma.strong@eprisk.com.au>
Sent: Wednesday, 23 March 2022 2:06 PM
To: Michael Cassidy <MichaelCassidy@eurofins.com>
Cc: #AU_CAU001_EnviroSampleVic <EnviroSampleVic@eurofins.com>
Subject: RE: WGTP TST Sample Delivery

CAUTION: EXTERNAL EMAIL - Sent from an email domain that is not formally trusted by Eurofins.

Do not click on links or open attachments unless you recognise the sender and are certain that the content is safe.

Hey Michael,

I know which sample it is. The 12am sample!

I will resend the COC with the additional sample and if you could use this in place of the other one.

Cheers,
Emma

Emma Strong
Environmental Scientist
M 0402 510 610 | E emma.strong@eprisk.com.au
EP Risk Management Pty Ltd

873586
L. Ryan

From: Michael Cassidy <MichaelCassidy@eurofins.com>
Sent: Wednesday, 23 March 2022 2:03 PM
To: Emma Strong <emma.strong@eprisk.com.au>
Cc: #AU_CAU001_EnviroSampleVic <EnviroSampleVic@eurofins.com>
Subject: RE: WGTP TST Sample Delivery

Hi Canh,

Can you please send the ID through for Emma?

Thanks,

Kind Regards,

Michael Cassidy

Phone: 8564 5940
Mobile: 0498 700 069
Email : MichaelCassidy@eurofins.com

From: Michael Cassidy
Sent: Wednesday, 23 March 2022 1:49 PM
To: Emma Strong <emma.strong@eprisk.com.au>
Cc: #AU_CAU001_EnviroSampleVic <EnviroSampleVic@eurofins.com>; Labreports.TST

<labreports.tst@agonenviro.com.au>; Amrit Kaur (Agile Analytics <Amrit.Kaur@agile-analytics.com.au>
Subject: RE: WGTP TST Sample Delivery

Hi Emma,

Just a heads up we have received one extra sample with these that is not mentioned on the COC. This will be outlined on your SRA and will be on hold until we receive confirmation from you to proceed with analysis,

Thanks,

Kind Regards,

Michael Cassidy

Phone: 8564 5940

Mobile: 0498 700 069

Email : MichaelCassidy@eurofins.com

873586
L. Buzell

From: Emma Strong <emma.strong@eprisk.com.au>

Sent: Wednesday, 23 March 2022 7:09 AM

To: Michael Cassidy <MichaelCassidy@eurofins.com>

Cc: #AU_CAU001_EnviroSampleVic <EnviroSampleVic@eurofins.com>; Labreports.TST

<labreports.tst@agonenviro.com.au>; Amrit Kaur (Agile Analytics <Amrit.Kaur@agile-analytics.com.au>

Subject: WGTP TST Sample Delivery

CAUTION: EXTERNAL EMAIL - Sent from an email domain that is not formally trusted by Eurofins.

Do not click on links or open attachments unless you recognise the sender and are certain that the content is safe.

Hey Michael,

Please find 2 x COCs for samples to be collected at pivot today, one for spoil and one for spoil water.

There are 2 batches.

Kind regards,

Emma Strong

Environmental Scientist

M 0402 510 610 | E emma.strong@eprisk.com.au

EP Risk Management Pty Ltd | ABN 81 147 147 591

Unit 22, 1 Ricketts Road | Mount Waverley VIC 3149

T +61 3 8540 7302 | W www.eprisk.com.au



This communication may contain privileged and confidential information and is intended for the named addressee only. If you have received this communication in error, please notify the sender and destroy this communication immediately. Any confidentiality, privilege or copyright is not waived or lost if this communication has been sent to you in error.

CHAIN OF CUSTODY RECORD
Eurofins Environment Testing Australia Pty Ltd



Sydney Laboratory
Unit F3 Bldg F 16 Biers
12/300 0400 EnviroSampleNSW@eurofins.com

Brisbane Laboratory
Unit 171 Smallwood Place Murrarie QLD 4172
07 3602 4600 EnviroSampleQLD@eurofins.com

Perth Laboratory
Unit 2 B1 Leach Highway Kewdale WA 6105
08 9251 9630 EnviroSampleWA@eurofins.com

Melbourne Laboratory
51 Monrey Road Dandenong South VIC 3175
03 8554 5000 EnviroSampleVIC@eurofins.com

Company: AGON Environmental - Tunnel Spoil Tending
Address: Unit 1776, 63-65 Turner St, Port Melbourne VIC 3207
Contact Name: Craig Trimbur
Phone No: +61 400 826 907 (Craig)
Special Directions: Please provide an interim lab report if finalised report has not been provided by 14 days from sample receipt.
Purchase Order:
Quote ID No: Agon WGTP TST

Project Name: WG TP-Tunnel
Ref #: 2022032305-Eurofin-12
Project Manager: EDD Format
Analyses: Sulfide WGP-R1-TRH/PAl/Phenol/DCP/PCB/VOC/Vinyl Chloride Metals (As, Cd, Cr, Cu, Ni, Pb, Hg, Ag, Sn, Mo, Se, Zn)/CN/Total Chloride/HH

Method of Shipment	Received By	Received By	Date	Date	Signature	Signature	Date	Date	Signature	Signature	Date	Date

Sample ID	Client Sample ID	Sampled Date/Time (dd/mm/yyyy hh:mm)	Match Spike (S) Water (W)	Analysis	1	2	3	4	5	6	7	8	9	10	11	12	13
SX_OB_20220322_07_59_SS_Triplicate_EUF		22/03/22	S	Sulfide	X	X	X	X	X	X	X	X	X	X			
SX_OB_20220322_08_04_SS_Primary_EUF		22/03/22	S	Sulfide	X	X	X	X	X	X	X	X	X	X			
SX_OB_20220322_11_59_SS_Primary_EUF		22/03/22	S	Sulfide	X	X	X	X	X	X	X	X	X	X			
SX_OB_20220322_15_54_SS_Primary_EUF		22/03/22	S	Sulfide	X	X	X	X	X	X	X	X	X	X			
SX_OB_20220322_15_55_SS_Duplicate_EUF		22/03/22	S	Sulfide	X	X	X	X	X	X	X	X	X	X			
SX_OB_20220322_16_11_SR_Rinsets_EUF		22/03/22	W	Sulfide													
SX_OB_20220322_16_13_SB_Blank_EUF		22/03/22	W	Sulfide													
SX_OB_20220323_20_06_SS_Primary_EUF		23/03/22	S	Sulfide	X	X	X	X	X	X	X	X	X	X			
SX_OB_20220323_00_15_SS_Primary_EUF		23/03/22	S	Sulfide	X	X	X	X	X	X	X	X	X	X			
SX_OB_20220323_03_39_SS_Primary_EUF		23/03/22	S	Sulfide	X	X	X	X	X	X	X	X	X	X			
Total Counts					8	8	0	8	8								

Project No: J00927
Project Name: WG TP-Tunnel
Ref #: 2022032305-Eurofin-12
Project Manager: EDD Format
ES&S: ES&S, E&S etc

Container (if): Hand Delivered Postal
Method of Shipment: Hand Delivered Postal

Signature:
Date:

Container (if): Hand Delivered Postal
Method of Shipment: Hand Delivered Postal

Signature:
Date:

Signature:
Date:

Signature:
Date:

Signature:
Date:

Signature:
Date:

Signature:
Date:

Signature:
Date:

Signature:
Date:

873586
L. Page

Agon Environmental Pty Ltd - VIC
3/224 Glen Osmond Road
Fullarton
SA 5063



NATA Accredited
Accreditation Number 1261
Site Number 1254

Accredited for compliance with ISO/IEC 17025 – Testing
NATA is a signatory to the ILAC Mutual Recognition
Arrangement for the mutual recognition of the
equivalence of testing, medical testing, calibration,
inspection, proficiency testing scheme providers and
reference materials producers reports and certificates.

Attention: **David Lawson**

Report **873586-L**
Project name **20220323051205-Eurofin-12**
Project ID **JC0927**
Received Date **Mar 23, 2022**

Client Sample ID			SX_OB_20220 322_07_59_SS _TriPLICATE_EU F	SX_OB_20220 322_08_04_SS _Primary_EUF	SX_OB_20220 322_11_59_SS _Primary_EUF	SX_OB_20220 322_15_54_SS _Primary_EUF
Sample Matrix			AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0
Eurofins Sample No.			M22-Ma46844	M22-Ma46845	M22-Ma46846	M22-Ma46847
Date Sampled			Mar 22, 2022	Mar 22, 2022	Mar 22, 2022	Mar 22, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.0	5.0	5.0	5.0
pH (off)	0.1	pH Units	5.1	5.2	5.2	5.2
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	80	74	74	77
13C5-PFPeA (surr.)	1	%	98	90	85	93
13C5-PFHxA (surr.)	1	%	76	69	68	73
13C4-PFHpA (surr.)	1	%	77	75	74	73
13C8-PFOA (surr.)	1	%	55	52	52	88
13C5-PFNA (surr.)	1	%	68	70	71	70
13C6-PFDA (surr.)	1	%	112	103	97	94
13C2-PFUnDA (surr.)	1	%	101	93	76	97
13C2-PFDoDA (surr.)	1	%	88	82	63	92
13C2-PFTeDA (surr.)	1	%	89	93	71	105
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05

Client Sample ID			SX_OB_20220 322_07_59_SS _TriPLICATE_EU F	SX_OB_20220 322_08_04_SS _Primary_EUF	SX_OB_20220 322_11_59_SS _Primary_EUF	SX_OB_20220 322_15_54_SS _Primary_EUF
Sample Matrix			AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0
Eurofins Sample No.			M22-Ma46844	M22-Ma46845	M22-Ma46846	M22-Ma46847
Date Sampled			Mar 22, 2022	Mar 22, 2022	Mar 22, 2022	Mar 22, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances						
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	133	135	104	125
D3-N-MeFOSA (surr.)	1	%	46	79	52	66
D5-N-EtFOSA (surr.)	1	%	43	84	58	64
D7-N-MeFOSE (surr.)	1	%	92	107	97	104
D9-N-EtFOSE (surr.)	1	%	92	108	96	102
D5-N-EtFOSAA (surr.)	1	%	69	51	45	71
D3-N-MeFOSAA (surr.)	1	%	71	66	42	73
Perfluoroalkyl sulfonic acids (PFASs)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	86	83	85	89
18O2-PFHxS (surr.)	1	%	89	94	97	94
13C8-PFOS (surr.)	1	%	99	103	97	108
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	84	85	82	80
13C2-6:2 FTSA (surr.)	1	%	109	80	84	91
13C2-8:2 FTSA (surr.)	1	%	100	115	106	95
13C2-10:2 FTSA (surr.)	1	%	100	81	55	101
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220 322_15_55_SS Duplicate_EU F	SX_OB_20220 322_20_06_SS Primary_EUF	SX_OB_20220 323_03_59_SS Primary_EUF	SX_OB_20220 322_07_59_SS TriPLICATE_EU F
Sample Matrix			AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - Reagent Water
Eurofins Sample No.			M22-Ma46848	M22-Ma46849	M22-Ma46850	M22-Ma46851
Date Sampled			Mar 22, 2022	Mar 22, 2022	Mar 23, 2022	Mar 22, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.0	5.0	5.0	6.6
pH (off)	0.1	pH Units	5.2	5.2	5.1	9.5
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	80	82	72	73
13C5-PFPeA (surr.)	1	%	94	101	87	84
13C5-PFHxA (surr.)	1	%	78	80	70	72
13C4-PFHpA (surr.)	1	%	82	80	77	70
13C8-PFOA (surr.)	1	%	72	72	59	58
13C5-PFNA (surr.)	1	%	77	70	77	68
13C6-PFDA (surr.)	1	%	113	106	115	122
13C2-PFUnDA (surr.)	1	%	110	92	110	132
13C2-PFDoDA (surr.)	1	%	107	81	103	112
13C2-PFTeDA (surr.)	1	%	129	93	127	141
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	138	120	129	175
D3-N-MeFOSA (surr.)	1	%	124	63	87	137
D5-N-EtFOSA (surr.)	1	%	122	54	89	93
D7-N-MeFOSE (surr.)	1	%	131	98	118	128
D9-N-EtFOSE (surr.)	1	%	127	90	116	118
D5-N-EtFOSAA (surr.)	1	%	67	57	68	92
D3-N-MeFOSAA (surr.)	1	%	100	68	76	88

Client Sample ID			SX_OB_20220 322_15_55_SS Duplicate_EU F	SX_OB_20220 322_20_06_SS Primary_EUF	SX_OB_20220 323_03_59_SS Primary_EUF	SX_OB_20220 322_07_59_SS Triuplicate_EU F
Sample Matrix			AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - Reagent Water
Eurofins Sample No.			M22-Ma46848	M22-Ma46849	M22-Ma46850	M22-Ma46851
Date Sampled			Mar 22, 2022	Mar 22, 2022	Mar 23, 2022	Mar 22, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFASs)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	94	89	78	91
18O2-PFHxS (surr.)	1	%	111	84	94	93
13C8-PFOS (surr.)	1	%	110	96	110	117
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	79	81	86	74
13C2-6:2 FTSA (surr.)	1	%	102	108	79	72
13C2-8:2 FTSA (surr.)	1	%	91	104	110	107
13C2-10:2 FTSA (surr.)	1	%	104	77	104	114
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220 322_08_04_SS Primary_EUF	SX_OB_20220 322_11_59_SS Primary_EUF	SX_OB_20220 322_15_54_SS Primary_EUF	SX_OB_20220 322_15_55_SS Duplicate_EU F
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22-Ma46852	M22-Ma46853	M22-Ma46854	M22-Ma46855
Date Sampled			Mar 22, 2022	Mar 22, 2022	Mar 22, 2022	Mar 22, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	6.6	6.6	6.6	6.6
pH (off)	0.1	pH Units	9.3	9.5	9.6	9.6

Client Sample ID			SX_OB_20220 322_08_04_SS _Primary_EUF	SX_OB_20220 322_11_59_SS _Primary_EUF	SX_OB_20220 322_15_54_SS _Primary_EUF	SX_OB_20220 322_15_55_SS _Duplicate_EU F
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22-Ma46852	M22-Ma46853	M22-Ma46854	M22-Ma46855
Date Sampled			Mar 22, 2022	Mar 22, 2022	Mar 22, 2022	Mar 22, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	77	78	75	76
13C5-PFPeA (surr.)	1	%	96	99	84	95
13C5-PFHxA (surr.)	1	%	73	78	70	77
13C4-PFHpA (surr.)	1	%	70	79	69	74
13C8-PFOA (surr.)	1	%	56	55	96	70
13C5-PFNA (surr.)	1	%	70	76	68	69
13C6-PFDA (surr.)	1	%	120	134	110	118
13C2-PFUnDA (surr.)	1	%	116	119	119	127
13C2-PFDoDA (surr.)	1	%	109	109	106	120
13C2-PFTeDA (surr.)	1	%	116	130	144	158
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	160	164	159	164
D3-N-MeFOSA (surr.)	1	%	102	60	101	106
D5-N-EtFOSA (surr.)	1	%	76	44	61	71
D7-N-MeFOSE (surr.)	1	%	117	98	109	107
D9-N-EtFOSE (surr.)	1	%	107	98	98	103
D5-N-EtFOSAA (surr.)	1	%	95	103	97	123
D3-N-MeFOSAA (surr.)	1	%	104	107	113	112
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01

Client Sample ID			SX_OB_20220 322_08_04_SS _Primary_EUF	SX_OB_20220 322_11_59_SS _Primary_EUF	SX_OB_20220 322_15_54_SS _Primary_EUF	SX_OB_20220 322_15_55_SS _Duplicate_EU F
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22-Ma46852	M22-Ma46853	M22-Ma46854	M22-Ma46855
Date Sampled			Mar 22, 2022	Mar 22, 2022	Mar 22, 2022	Mar 22, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFASs)						
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	91	89	92	89
18O2-PFHxS (surr.)	1	%	100	102	90	89
13C8-PFOS (surr.)	1	%	120	126	111	105
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	75	81	70	80
13C2-6:2 FTSA (surr.)	1	%	84	91	64	93
13C2-8:2 FTSA (surr.)	1	%	129	147	97	125
13C2-10:2 FTSA (surr.)	1	%	100	107	91	121
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220 322_20_06_SS _Primary_EUF	SX_OB_20220 323_03_59_SS _Primary_EUF	SX_OB_20220 323_00_15_SS _Primary_EUF	SX_OB_20220 323_00_15_SS _Primary_EUF
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - pH 5.0	AUS Leachate - Reagent Water
Eurofins Sample No.			M22-Ma46856	M22-Ma46857	M22-Ma47027	M22-Ma47028
Date Sampled			Mar 22, 2022	Mar 23, 2022	Mar 23, 2022	Mar 23, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	1.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	6.6	6.6	5.0	6.6
pH (off)	0.1	pH Units	9.6	9.2	5.2	9.1
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01

Client Sample ID			SX_OB_20220 322_20_06_SS _Primary_EUF	SX_OB_20220 323_03_59_SS _Primary_EUF	SX_OB_20220 323_00_15_SS _Primary_EUF	SX_OB_20220 323_00_15_SS _Primary_EUF
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - pH 5.0	AUS Leachate - Reagent Water
Eurofins Sample No.			M22-Ma46856	M22-Ma46857	M22-Ma47027	M22-Ma47028
Date Sampled			Mar 22, 2022	Mar 23, 2022	Mar 23, 2022	Mar 23, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	78	78	80	78
13C5-PFPeA (surr.)	1	%	90	88	100	94
13C5-PFHxA (surr.)	1	%	76	76	82	77
13C4-PFHpA (surr.)	1	%	68	79	84	78
13C8-PFOA (surr.)	1	%	67	61	65	62
13C5-PFNA (surr.)	1	%	63	76	76	75
13C6-PFDA (surr.)	1	%	102	148	117	130
13C2-PFUnDA (surr.)	1	%	97	138	115	124
13C2-PFDoDA (surr.)	1	%	90	133	105	115
13C2-PFTeDA (surr.)	1	%	121	135	135	125
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	146	171	159	161
D3-N-MeFOSA (surr.)	1	%	113	117	84	99
D5-N-EtFOSA (surr.)	1	%	64	88	72	78
D7-N-MeFOSE (surr.)	1	%	96	141	130	114
D9-N-EtFOSE (surr.)	1	%	84	133	120	105
D5-N-EtFOSAA (surr.)	1	%	70	143	74	122
D3-N-MeFOSAA (surr.)	1	%	87	146	92	115
Perfluoroalkyl sulfonic acids (PFSA)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	87	91	90	87
18O2-PFHxS (surr.)	1	%	95	109	103	110
13C8-PFOS (surr.)	1	%	89	119	116	112

Client Sample ID			SX_OB_20220 322_20_06_SS _Primary_EUF	SX_OB_20220 323_03_59_SS _Primary_EUF	SX_OB_20220 323_00_15_SS _Primary_EUF	SX_OB_20220 323_00_15_SS _Primary_EUF
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - pH 5.0	AUS Leachate - Reagent Water
Eurofins Sample No.			M22-Ma46856	M22-Ma46857	M22-Ma47027	M22-Ma47028
Date Sampled			Mar 22, 2022	Mar 23, 2022	Mar 23, 2022	Mar 23, 2022
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	77	83	82	86
13C2-6:2 FTSA (surr.)	1	%	66	98	109	90
13C2-8:2 FTSA (surr.)	1	%	98	149	130	141
13C2-10:2 FTSA (surr.)	1	%	110	117	100	103
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
AUS Leaching Procedure			
pH (initial) - Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes	Melbourne	Mar 24, 2022	0 Days
pH (Leachate fluid) - Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes	Melbourne	Mar 24, 2022	0 Days
pH (off) - Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes	Melbourne	Mar 24, 2022	0 Days
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Mar 24, 2022	28 Days
Perfluoroalkyl sulfonamido substances - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Mar 24, 2022	28 Days
Perfluoroalkyl sulfonic acids (PFSAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Mar 24, 2022	28 Days
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Mar 24, 2022	28 Days
PFASs Summations - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Mar 23, 2022	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	Mar 23, 2022 1:00 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	873586	Due:	Mar 30, 2022
Project Name:	20220323051205-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFAS)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID				
1	SX_OB_20220322_07_59_S_S_Triplicate_EUF	Mar 22, 2022	7:59AM	Soil	M22-Ma46835		X	X	X
2	SX_OB_20220322_08_04_S_S_Primary_EUF	Mar 22, 2022	8:04AM	Soil	M22-Ma46836		X	X	X
3	SX_OB_20220322_11_59_S_S_Primary_EUF	Mar 22, 2022	11:59AM	Soil	M22-Ma46837		X	X	X

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	Mar 23, 2022 1:00 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	873586	Due:	Mar 30, 2022
Project Name:	20220323051205-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
4	SX_OB_20220322_15_54_S_S_Primary_EU_F	Mar 22, 2022	3:54PM	Soil	M22-Ma46838		X	X	X
5	SX_OB_20220322_15_55_S_S_Duplicate_EUF	Mar 22, 2022	3:55PM	Soil	M22-Ma46839		X	X	X
6	SX_OB_20220322_16_11_SR_Rinsate_EUF	Mar 22, 2022	4:11PM	Water	M22-Ma46840			X	
7	SX_OB_20220322_16_13_S	Mar 22, 2022	4:13PM	Water	M22-Ma46841			X	

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063
Project Name: 20220323051205-Eurofin-12
Project ID: JC0927

Order No.:
Report #: 873586
Phone: 08 8338 1009
Fax:

Received: Mar 23, 2022 1:00 PM
Due: Mar 30, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	B_Blank_EUF								
8	SX_OB_20220 322_20_06_S S_Primary_EU F	Mar 22, 2022	8:06PM	Soil	M22-Ma46842		X	X	X
9	SX_OB_20220 323_03_59_S S_Primary_EU F	Mar 23, 2022	3:59AM	Soil	M22-Ma46843		X	X	X
10	SX_OB_20220 322_07_59_S S_Triplicate_E UF	Mar 22, 2022	7:59AM	AUS Leachate - pH 5.0	M22-Ma46844	X		X	
11	SX_OB_20220	Mar 22, 2022	8:04AM	AUS Leachate	M22-Ma46845	X		X	

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063
Project Name: 20220323051205-Eurofin-12
Project ID: JC0927

Order No.:
Report #: 873586
Phone: 08 8338 1009
Fax:

Received: Mar 23, 2022 1:00 PM
Due: Mar 30, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	322_08_04_S S_Primary_EU F			- pH 5.0					
12	SX_OB_20220 322_11_59_S S_Primary_EU F	Mar 22, 2022	11:59AM	AUS Leachate - pH 5.0	M22-Ma46846	X		X	
13	SX_OB_20220 322_15_54_S S_Primary_EU F	Mar 22, 2022	3:54PM	AUS Leachate - pH 5.0	M22-Ma46847	X		X	
14	SX_OB_20220 322_15_55_S S_Duplicate_E	Mar 22, 2022	3:55PM	AUS Leachate - pH 5.0	M22-Ma46848	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	Mar 23, 2022 1:00 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	873586	Due:	Mar 30, 2022
Project Name:	20220323051205-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	UF								
15	SX_OB_20220322_20_06_S_S_Primary_EU_F	Mar 22, 2022	8:06PM	AUS Leachate - pH 5.0	M22-Ma46849	X		X	
16	SX_OB_20220323_03_59_S_S_Primary_EU_F	Mar 23, 2022	3:59AM	AUS Leachate - pH 5.0	M22-Ma46850	X		X	
17	SX_OB_20220322_07_59_S_S_Triplicate_EU_F	Mar 22, 2022	7:59AM	AUS Leachate - Reagent Water	M22-Ma46851	X		X	
18	SX_OB_20220322_08_04AM	Mar 22, 2022	8:04AM	AUS Leachate	M22-Ma46852	X		X	

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063

Project Name: 20220323051205-Eurofin-12
Project ID: JC0927

Order No.:
Report #: 873586
Phone: 08 8338 1009
Fax:

Received: Mar 23, 2022 1:00 PM
Due: Mar 30, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	322_08_04_S S_Primary_EU F			- Reagent Water					
19	SX_OB_20220 322_11_59_S S_Primary_EU F	Mar 22, 2022	11:59AM	AUS Leachate - Reagent Water	M22-Ma46853	X		X	
20	SX_OB_20220 322_15_54_S S_Primary_EU F	Mar 22, 2022	3:54PM	AUS Leachate - Reagent Water	M22-Ma46854	X		X	
21	SX_OB_20220 322_15_55_S S_Duplicate_E	Mar 22, 2022	3:55PM	AUS Leachate - Reagent Water	M22-Ma46855	X		X	

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063
Project Name: 20220323051205-Eurofin-12
Project ID: JC0927

Order No.:
Report #: 873586
Phone: 08 8338 1009
Fax:

Received: Mar 23, 2022 1:00 PM
Due: Mar 30, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	UF								
22	SX_OB_20220322_20_06_S_S_Primary_EU F	Mar 22, 2022	8:06PM	AUS Leachate - Reagent Water	M22-Ma46856	X		X	
23	SX_OB_20220323_03_59_S_S_Primary_EU F	Mar 23, 2022	3:59AM	AUS Leachate - Reagent Water	M22-Ma46857	X		X	
24	SX_OB_20220323_00_15_S_S_Primary_EU F	Mar 23, 2022	12:15AM	Soil	M22-Ma46858		X	X	X
25	SX_OB_20220323_00_15_S_S_Primary_EU F	Mar 23, 2022	12:15AM	AUS Leachate	M22-Ma47027	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	Mar 23, 2022 1:00 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	873586	Due:	Mar 30, 2022
Project Name:	20220323051205-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	323_00_15_S S_Primary_EU F			- pH 5.0					
26	SX_OB_20220 323_00_15_S S_Primary_EU F	Mar 23, 2022	12:15AM	AUS Leachate - Reagent Water	M22-Ma47028	X		X	
Test Counts						16	8	26	8

Internal Quality Control Review and Glossary
General

- Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
- All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
- SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- Samples were analysed on an 'as received' basis.
- Information identified on this report with blue colour, indicates data provided by customer that may have an impact on the results.
- This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	mg/L: milligrams per litre	µg/L: micrograms per litre
ppm: parts per million	ppb: parts per billion	%: Percentage
org/100 mL: Organisms per 100 millilitres	NTU: Nephelometric Turbidity Units	MPN/100 mL: Most Probable Number of organisms per 100 millilitres

Terms

APHA	American Public Health Association
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
TBTO	Tributyltin oxide (<i>bis</i> -tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment however free tributyltin was measured and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 5.4
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR: No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

QC Data General Comments

- Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
- Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
- For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
- Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Method Blank						
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01		0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01		0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.01		0.01	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01		0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01		0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01		0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01		0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01		0.01	Pass	
Perfluorotridecanoic acid (PFTTrDA)	ug/L	< 0.01		0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01		0.01	Pass	
Method Blank						
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05		0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05		0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05		0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/L	< 0.05		0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/L	< 0.05		0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05		0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05		0.05	Pass	
Method Blank						
Perfluoroalkyl sulfonic acids (PFSA)						
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01		0.01	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/L	< 0.01		0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/L	< 0.01		0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01		0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01		0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01		0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01		0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/L	< 0.01		0.01	Pass	
Method Blank						
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.01		0.01	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/L	< 0.05		0.05	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01		0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01		0.01	Pass	
LCS - % Recovery						
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)	%	74		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	104		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	92		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	91		50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	88		50-150	Pass	
Perfluorononanoic acid (PFNA)	%	92		50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	97		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	96		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	95		50-150	Pass	
Perfluorotridecanoic acid (PFTTrDA)	%	100		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	97		50-150	Pass	
LCS - % Recovery						

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code	
Perfluoroalkyl sulfonamido substances								
Perfluorooctane sulfonamide (FOSA)	%	100			50-150	Pass		
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	108			50-150	Pass		
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	80			50-150	Pass		
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	90			50-150	Pass		
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	93			50-150	Pass		
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	91			50-150	Pass		
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	109			50-150	Pass		
LCS - % Recovery								
Perfluoroalkyl sulfonic acids (PFSA's)								
Perfluorobutanesulfonic acid (PFBS)	%	84			50-150	Pass		
Perfluorononanesulfonic acid (PFNS)	%	79			50-150	Pass		
Perfluoropropanesulfonic acid (PFPrS)	%	111			50-150	Pass		
Perfluoropentanesulfonic acid (PFPeS)	%	88			50-150	Pass		
Perfluorohexanesulfonic acid (PFHxS)	%	92			50-150	Pass		
Perfluoroheptanesulfonic acid (PFHpS)	%	88			50-150	Pass		
Perfluorooctanesulfonic acid (PFOS)	%	85			50-150	Pass		
Perfluorodecanesulfonic acid (PFDS)	%	79			50-150	Pass		
LCS - % Recovery								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)								
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	97			50-150	Pass		
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	101			50-150	Pass		
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	69			50-150	Pass		
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	109			50-150	Pass		
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)								
				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	M22-Ma46850	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	M22-Ma46850	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	M22-Ma46850	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	M22-Ma46850	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	M22-Ma46850	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanoic acid (PFNA)	M22-Ma46850	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	M22-Ma46850	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	M22-Ma46850	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	M22-Ma46850	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	M22-Ma46850	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma46850	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonamido substances								
				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-Ma46850	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma46850	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma46850	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma46850	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma46850	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma46850	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma46850	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-Ma46850	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-Ma46850	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma46850	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma46850	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma46850	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma46850	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-Ma46850	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-Ma46850	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma46850	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma46850	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma46850	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma46850	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Comments
Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
C01	Leachate Fluid Key: 1 - pH 5.0; 2 - pH 2.9; 3 - pH 9.2; 4 - Reagent (DI) water; 5 - Client sample, 6 - other
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).

Authorised by:

Michael Cassidy	Analytical Services Manager
Joseph Edouard	Senior Analyst-PFAS (VIC)



Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

Agon Environmental Pty Ltd - VIC
3/224 Glen Osmond Road
Fullarton
SA 5063



NATA Accredited
Accreditation Number 1261
Site Number 1254

Accredited for compliance with ISO/IEC 17025 – Testing
NATA is a signatory to the ILAC Mutual Recognition
Arrangement for the mutual recognition of the
equivalence of testing, medical testing, calibration,
inspection, proficiency testing scheme providers and
reference materials producers reports and certificates.

Attention: **David Lawson**

Report **873586-S**
Project name **20220323051205-Eurofin-12**
Project ID **JC0927**
Received Date **Mar 23, 2022**

Client Sample ID			SX_OB_20220 322_07_59_SS _TriPLICATE_EU F	SX_OB_20220 322_08_04_SS _Primary_EUF	SX_OB_20220 322_11_59_SS _Primary_EUF	SX_OB_20220 322_15_54_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma46835	M22-Ma46836	M22-Ma46837	M22-Ma46838
Date Sampled			Mar 22, 2022	Mar 22, 2022	Mar 22, 2022	Mar 22, 2022
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	22	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	64	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	64	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
Volatile Organics						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			SX_OB_20220 322_07_59_SS _TriPLICATE_EU F	SX_OB_20220 322_08_04_SS _Primary_EUF	SX_OB_20220 322_11_59_SS _Primary_EUF	SX_OB_20220 322_15_54_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma46835	M22-Ma46836	M22-Ma46837	M22-Ma46838
Date Sampled			Mar 22, 2022	Mar 22, 2022	Mar 22, 2022	Mar 22, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	1.4	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	1.4	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	60	79	120	131
Toluene-d8 (surr.)	1	%	85	85	74	85
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			SX_OB_20220 322_07_59_SS _TriPLICATE_EU F	SX_OB_20220 322_08_04_SS _Primary_EUF	SX_OB_20220 322_11_59_SS _Primary_EUF	SX_OB_20220 322_15_54_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma46835	M22-Ma46836	M22-Ma46837	M22-Ma46838
Date Sampled			Mar 22, 2022	Mar 22, 2022	Mar 22, 2022	Mar 22, 2022
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	87	98	85	78
p-Terphenyl-d14 (surr.)	1	%	85	99	87	79
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchloroendate (surr.)	1	%	102	87	68	97
Tetrachloro-m-xylene (surr.)	1	%	135	121	102	116

Client Sample ID			SX_OB_20220 322_07_59_SS _TriPLICATE_EU F	SX_OB_20220 322_08_04_SS _Primary_EUF	SX_OB_20220 322_11_59_SS _Primary_EUF	SX_OB_20220 322_15_54_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma46835	M22-Ma46836	M22-Ma46837	M22-Ma46838
Date Sampled			Mar 22, 2022	Mar 22, 2022	Mar 22, 2022	Mar 22, 2022
Test/Reference	LOR	Unit				
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	102	87	68	97
Tetrachloro-m-xylene (surr.)	1	%	135	121	102	116
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4,5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2,4,6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2,6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4,6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4,6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2,4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	67	91	79	77
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)						
Chromium (hexavalent)	1	mg/kg	< 1	1.0	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	< 100	< 100	< 100	< 100
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	9.5	9.4	9.6	9.5
% Moisture	1	%	31	28	27	26
Heavy Metals						
Arsenic	2	mg/kg	38	26	25	59
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	130	120	100	190
Copper	5	mg/kg	67	60	59	98
Lead	5	mg/kg	5.4	< 5	< 5	7.1
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220 322_07_59_SS _TriPLICATE_EU F	SX_OB_20220 322_08_04_SS _Primary_EUF	SX_OB_20220 322_11_59_SS _Primary_EUF	SX_OB_20220 322_15_54_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma46835	M22-Ma46836	M22-Ma46837	M22-Ma46838
Date Sampled			Mar 22, 2022	Mar 22, 2022	Mar 22, 2022	Mar 22, 2022
Test/Reference	LOR	Unit				
Heavy Metals						
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	200	190	190	250
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	130	110	110	160
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanoic acid (PFNA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTTrDA) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	105	108	101	101
13C5-PFPeA (surr.)	1	%	105	116	105	105
13C5-PFHxA (surr.)	1	%	116	106	96	107
13C4-PFHpA (surr.)	1	%	111	109	105	103
13C8-PFOA (surr.)	1	%	95	92	81	92
13C5-PFNA (surr.)	1	%	112	119	107	102
13C6-PFDA (surr.)	1	%	65	53	63	57
13C2-PFUnDA (surr.)	1	%	106	97	88	94
13C2-PFDoDA (surr.)	1	%	119	118	116	114
13C2-PFTeDA (surr.)	1	%	113	121	115	113
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	10	ug/kg	< 10	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	10	ug/kg	< 10	< 10	< 10	< 10
13C8-FOSA (surr.)	1	%	106	109	104	102
D3-N-MeFOSA (surr.)	1	%	82	79	77	82
D5-N-EtFOSA (surr.)	1	%	87	90	84	86
D7-N-MeFOSE (surr.)	1	%	104	108	98	92
D9-N-EtFOSE (surr.)	1	%	103	101	98	99
D5-N-EtFOSAA (surr.)	1	%	77	86	69	80
D3-N-MeFOSAA (surr.)	1	%	76	103	79	77

Client Sample ID			SX_OB_20220 322_07_59_SS _TriPLICATE_EU F	SX_OB_20220 322_08_04_SS _Primary_EUF	SX_OB_20220 322_11_59_SS _Primary_EUF	SX_OB_20220 322_15_54_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma46835	M22-Ma46836	M22-Ma46837	M22-Ma46838
Date Sampled			Mar 22, 2022	Mar 22, 2022	Mar 22, 2022	Mar 22, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFASs)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	100	94	89	95
18O2-PFHxS (surr.)	1	%	92	107	94	94
13C8-PFOS (surr.)	1	%	65	64	62	64
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	98	100	102	99
13C2-6:2 FTSA (surr.)	1	%	76	79	57	64
13C2-8:2 FTSA (surr.)	1	%	87	68	74	83
13C2-10:2 FTSA (surr.)	1	%	91	94	75	74
PFASs Summations						
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50	< 50	< 50

Client Sample ID			SX_OB_20220 322_15_55_SS _Duplicate_EU F	SX_OB_20220 322_20_06_SS _Primary_EUF	SX_OB_20220 323_03_59_SS _Primary_EUF	SX_OB_20220 323_00_15_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma46839	M22-Ma46842	M22-Ma46843	M22-Ma46858
Date Sampled			Mar 22, 2022	Mar 22, 2022	Mar 23, 2022	Mar 23, 2022
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	27	23	22
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	< 20	< 20

Client Sample ID			SX_OB_20220 322_15_55_SS Duplicate_EU F	SX_OB_20220 322_20_06_SS Primary_EUF	SX_OB_20220 323_03_59_SS Primary_EUF	SX_OB_20220 323_00_15_SS Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma46839	M22-Ma46842	M22-Ma46843	M22-Ma46858
Date Sampled			Mar 22, 2022	Mar 22, 2022	Mar 23, 2022	Mar 23, 2022
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
Volatile Organics						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			SX_OB_20220 322_15_55_SS Duplicate_EU F	SX_OB_20220 322_20_06_SS Primary_EUF	SX_OB_20220 323_03_59_SS Primary_EUF	SX_OB_20220 323_00_15_SS Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma46839	M22-Ma46842	M22-Ma46843	M22-Ma46858
Date Sampled			Mar 22, 2022	Mar 22, 2022	Mar 23, 2022	Mar 23, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	93	65	77	88
Toluene-d8 (surr.)	1	%	80	61	51	69
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	93	94	56	53
p-Terphenyl-d14 (surr.)	1	%	84	97	52	51

Client Sample ID			SX_OB_20220 322_15_55_SS Duplicate_EU F	SX_OB_20220 322_20_06_SS Primary_EUF	SX_OB_20220 323_03_59_SS Primary_EUF	SX_OB_20220 323_00_15_SS Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma46839	M22-Ma46842	M22-Ma46843	M22-Ma46858
Date Sampled			Mar 22, 2022	Mar 22, 2022	Mar 23, 2022	Mar 23, 2022
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	101	95	60	55
Tetrachloro-m-xylene (surr.)	1	%	123	129	70	67
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	101	95	60	55
Tetrachloro-m-xylene (surr.)	1	%	123	129	70	67
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4,5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2,4,6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2,6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1

Client Sample ID			SX_OB_20220 322_15_55_SS Duplicate_EU F	SX_OB_20220 322_20_06_SS Primary_EUF	SX_OB_20220 323_03_59_SS Primary_EUF	SX_OB_20220 323_00_15_SS Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma46839	M22-Ma46842	M22-Ma46843	M22-Ma46858
Date Sampled			Mar 22, 2022	Mar 22, 2022	Mar 23, 2022	Mar 23, 2022
Test/Reference	LOR	Unit				
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	84	90	55	52
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)						
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Cyanide (total)						
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)						
Fluoride (Total)	100	mg/kg	< 100	< 100	< 100	< 100
pH (1:5 Aqueous extract at 25°C as rec.)						
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	9.6	9.6	8.6	9.0
% Moisture						
% Moisture	1	%	28	29	32	35
Heavy Metals						
Arsenic	2	mg/kg	39	41	43	47
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	190	170	170	190
Copper	5	mg/kg	86	73	80	99
Lead	5	mg/kg	7.2	6.7	5.7	8.1
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	270	230	250	300
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	170	160	170	180
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanoic acid (PFNA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTTrDA) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTTeDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	106	102	100	95
13C5-PFPeA (surr.)	1	%	111	109	112	95
13C5-PFHxA (surr.)	1	%	107	103	89	95

Client Sample ID			SX_OB_20220 322_15_55_SS Duplicate_EU F	SX_OB_20220 322_20_06_SS Primary_EUF	SX_OB_20220 323_03_59_SS Primary_EUF	SX_OB_20220 323_00_15_SS Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma46839	M22-Ma46842	M22-Ma46843	M22-Ma46858
Date Sampled			Mar 22, 2022	Mar 22, 2022	Mar 23, 2022	Mar 23, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
13C4-PFHpA (surr.)	1	%	106	111	104	97
13C8-PFOA (surr.)	1	%	105	93	83	80
13C5-PFNA (surr.)	1	%	119	114	106	113
13C6-PFDA (surr.)	1	%	51	59	57	99
13C2-PFUnDA (surr.)	1	%	88	106	95	88
13C2-PFDoDA (surr.)	1	%	118	111	115	108
13C2-PFTeDA (surr.)	1	%	130	118	116	98
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	10	ug/kg	< 10	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	10	ug/kg	< 10	< 10	< 10	< 10
13C8-FOSA (surr.)	1	%	108	104	107	93
D3-N-MeFOSA (surr.)	1	%	83	84	77	74
D5-N-EtFOSA (surr.)	1	%	89	85	83	76
D7-N-MeFOSE (surr.)	1	%	101	94	94	89
D9-N-EtFOSE (surr.)	1	%	102	98	100	92
D5-N-EtFOSAA (surr.)	1	%	90	67	85	69
D3-N-MeFOSAA (surr.)	1	%	92	85	83	78
Perfluoroalkyl sulfonic acids (PFSA)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	99	96	81	82
18O2-PFHxS (surr.)	1	%	104	85	102	87
13C8-PFOS (surr.)	1	%	58	80	65	66
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	102	93	97	94
13C2-6:2 FTSA (surr.)	1	%	69	78	62	62

Client Sample ID			SX_OB_20220 322_15_55_SS _Duplicate_EU F	SX_OB_20220 322_20_06_SS _Primary_EUF	SX_OB_20220 323_03_59_SS _Primary_EUF	SX_OB_20220 323_00_15_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma46839	M22-Ma46842	M22-Ma46843	M22-Ma46858
Date Sampled			Mar 22, 2022	Mar 22, 2022	Mar 23, 2022	Mar 23, 2022
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
13C2-8:2 FTSA (surr.)	1	%	57	69	64	70
13C2-10:2 FTSA (surr.)	1	%	91	86	81	91
PFASs Summations						
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50	< 50	< 50

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
IWRG 621 WGTP Suite			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Melbourne	Mar 23, 2022	14 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Melbourne	Mar 23, 2022	14 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Melbourne	Mar 23, 2022	14 Days
Volatile Organics - Method: USEPA 8260 - MGT 350A Volatile Organics by GCMS	Melbourne	Mar 23, 2022	7 Days
Volatile Organics - Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices (USEPA 8260)	Melbourne	Mar 23, 2022	7 Days
Polycyclic Aromatic Hydrocarbons - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Melbourne	Mar 23, 2022	14 Days
Organochlorine Pesticides - Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)	Melbourne	Mar 23, 2022	14 Days
Polychlorinated Biphenyls - Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8082)	Melbourne	Mar 23, 2022	28 Days
Phenols (Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Melbourne	Mar 23, 2022	14 Days
Phenols (non-Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Melbourne	Mar 23, 2022	14 Days
Chromium (hexavalent) - Method: LTM-INO-4100 Hexavalent Chromium by Spectrometric detection	Melbourne	Mar 23, 2022	28 Days
Cyanide (total) - Method: LTM-INO-4020 Total Free WAD Cyanide by CFA	Melbourne	Mar 24, 2022	14 Days
Fluoride (Total) - Method: LTM-INO-4150 Determination of Total Fluoride PART A – CIC - Method: LTM-INO-4150 Determination of Total Fluoride PART B – ISE	Melbourne	Mar 24, 2022	28 Days
pH (1:5 Aqueous extract at 25°C as rec.) - Method: LTM-GEN-7090 pH in soil by ISE	Melbourne	Mar 23, 2022	7 Days
Metals IWRG 621 : Metals M12 - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Melbourne	Mar 23, 2022	28 Days
% Moisture - Method: LTM-GEN-7080 Moisture	Melbourne	Mar 23, 2022	14 Days
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Mar 23, 2022	28 Days
Perfluoroalkyl sulfonamido substances - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Mar 23, 2022	28 Days
Perfluoroalkyl sulfonic acids (PFSAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Mar 23, 2022	28 Days
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Mar 23, 2022	28 Days
PFASs Summations - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Mar 23, 2022	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	Mar 23, 2022 1:00 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	873586	Due:	Mar 30, 2022
Project Name:	20220323051205-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID				
1	SX_OB_20220322_07_59_S_S_Triplicate_EUF	Mar 22, 2022	7:59AM	Soil	M22-Ma46835		X	X	X
2	SX_OB_20220322_08_04_S_S_Primary_EUF	Mar 22, 2022	8:04AM	Soil	M22-Ma46836		X	X	X
3	SX_OB_20220322_11_59_S_S_Primary_EUF	Mar 22, 2022	11:59AM	Soil	M22-Ma46837		X	X	X

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	Mar 23, 2022 1:00 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	873586	Due:	Mar 30, 2022
Project Name:	20220323051205-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
4	SX_OB_20220322_15_54_S_S_Primary_EU_F	Mar 22, 2022	3:54PM	Soil	M22-Ma46838		X	X	X
5	SX_OB_20220322_15_55_S_S_Duplicate_EUF	Mar 22, 2022	3:55PM	Soil	M22-Ma46839		X	X	X
6	SX_OB_20220322_16_11_SR_Rinsate_EUF	Mar 22, 2022	4:11PM	Water	M22-Ma46840			X	
7	SX_OB_20220322_16_13_S	Mar 22, 2022	4:13PM	Water	M22-Ma46841			X	

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063
Project Name: 20220323051205-Eurofin-12
Project ID: JC0927

Order No.:
Report #: 873586
Phone: 08 8338 1009
Fax:

Received: Mar 23, 2022 1:00 PM
Due: Mar 30, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	B_Blank_EUF								
8	SX_OB_20220 322_20_06_S S_Primary_EU F	Mar 22, 2022	8:06PM	Soil	M22-Ma46842		X	X	X
9	SX_OB_20220 323_03_59_S S_Primary_EU F	Mar 23, 2022	3:59AM	Soil	M22-Ma46843		X	X	X
10	SX_OB_20220 322_07_59_S S_Triplicate_E UF	Mar 22, 2022	7:59AM	AUS Leachate - pH 5.0	M22-Ma46844	X		X	
11	SX_OB_20220	Mar 22, 2022	8:04AM	AUS Leachate	M22-Ma46845	X		X	

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063
Project Name: 20220323051205-Eurofin-12
Project ID: JC0927

Order No.:
Report #: 873586
Phone: 08 8338 1009
Fax:

Received: Mar 23, 2022 1:00 PM
Due: Mar 30, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	322_08_04_S S_Primary_EU F			- pH 5.0					
12	SX_OB_20220 322_11_59_S S_Primary_EU F	Mar 22, 2022	11:59AM	AUS Leachate - pH 5.0	M22-Ma46846	X		X	
13	SX_OB_20220 322_15_54_S S_Primary_EU F	Mar 22, 2022	3:54PM	AUS Leachate - pH 5.0	M22-Ma46847	X		X	
14	SX_OB_20220 322_15_55_S S_Duplicate_E	Mar 22, 2022	3:55PM	AUS Leachate - pH 5.0	M22-Ma46848	X		X	

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063
Project Name: 20220323051205-Eurofin-12
Project ID: JC0927

Order No.:
Report #: 873586
Phone: 08 8338 1009
Fax:

Received: Mar 23, 2022 1:00 PM
Due: Mar 30, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	UF								
15	SX_OB_20220322_20_06_S_S_Primary_EU F	Mar 22, 2022	8:06PM	AUS Leachate - pH 5.0	M22-Ma46849	X		X	
16	SX_OB_20220323_03_59_S_S_Primary_EU F	Mar 23, 2022	3:59AM	AUS Leachate - pH 5.0	M22-Ma46850	X		X	
17	SX_OB_20220322_07_59_S_S_Triplicate_EU F	Mar 22, 2022	7:59AM	AUS Leachate - Reagent Water	M22-Ma46851	X		X	
18	SX_OB_20220322_08_04AM	Mar 22, 2022	8:04AM	AUS Leachate	M22-Ma46852	X		X	

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063
Project Name: 20220323051205-Eurofin-12
Project ID: JC0927

Order No.:
Report #: 873586
Phone: 08 8338 1009
Fax:

Received: Mar 23, 2022 1:00 PM
Due: Mar 30, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	322_08_04_S S_Primary_EU F			- Reagent Water					
19	SX_OB_20220 322_11_59_S S_Primary_EU F	Mar 22, 2022	11:59AM	AUS Leachate - Reagent Water	M22-Ma46853	X		X	
20	SX_OB_20220 322_15_54_S S_Primary_EU F	Mar 22, 2022	3:54PM	AUS Leachate - Reagent Water	M22-Ma46854	X		X	
21	SX_OB_20220 322_15_55_S S_Duplicate_E	Mar 22, 2022	3:55PM	AUS Leachate - Reagent Water	M22-Ma46855	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	Mar 23, 2022 1:00 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	873586	Due:	Mar 30, 2022
Project Name:	20220323051205-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	UF								
22	SX_OB_20220322_20_06_S_S_Primary_EU F	Mar 22, 2022	8:06PM	AUS Leachate - Reagent Water	M22-Ma46856	X		X	
23	SX_OB_20220323_03_59_S_S_Primary_EU F	Mar 23, 2022	3:59AM	AUS Leachate - Reagent Water	M22-Ma46857	X		X	
24	SX_OB_20220323_00_15_S_S_Primary_EU F	Mar 23, 2022	12:15AM	Soil	M22-Ma46858		X	X	X
25	SX_OB_20220323_00_15_S_S_Primary_EU F	Mar 23, 2022	12:15AM	AUS Leachate	M22-Ma47027	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	Mar 23, 2022 1:00 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	873586	Due:	Mar 30, 2022
Project Name:	20220323051205-Eurofin-12	Phone:	08 8338 1009	Priority:	5 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	323_00_15_S S_Primary_EU F			- pH 5.0					
26	SX_OB_20220 323_00_15_S S_Primary_EU F	Mar 23, 2022	12:15AM	AUS Leachate - Reagent Water	M22-Ma47028	X		X	
Test Counts						16	8	26	8

Internal Quality Control Review and Glossary

General

- Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
- All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
- SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- Samples were analysed on an 'as received' basis.
- Information identified on this report with blue colour, indicates data provided by customer that may have an impact on the results.
- This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	mg/L: milligrams per litre	µg/L: micrograms per litre
ppm: parts per million	ppb: parts per billion	%: Percentage
org/100 mL: Organisms per 100 millilitres	NTU: Nephelometric Turbidity Units	MPN/100 mL: Most Probable Number of organisms per 100 millilitres

Terms

APHA	American Public Health Association
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
TBTO	Tributyltin oxide (<i>bis</i> -tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment however free tributyltin was measured and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 5.4
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR: No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

QC Data General Comments

- Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
- Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
- For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
- Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Volatile Organics							
Hexachlorobutadiene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Benzene	mg/kg	< 0.1			0.1	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g,h,i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a,h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-HCH	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-HCH	mg/kg	< 0.05			0.05	Pass	
d-HCH	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-HCH (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.05			0.05	Pass	
Toxaphene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.1			0.1	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.1			0.1	Pass	
Aroclor-1242	mg/kg	< 0.1			0.1	Pass	
Aroclor-1248	mg/kg	< 0.1			0.1	Pass	
Aroclor-1254	mg/kg	< 0.1			0.1	Pass	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB*	mg/kg	< 0.1			0.1	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2,4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2,4,5-Trichlorophenol	mg/kg	< 1			1	Pass	
2,4,6-Trichlorophenol	mg/kg	< 1			1	Pass	
2,6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4,6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4,6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Nitrophenol	mg/kg	< 1			1.0	Pass	
2,4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2,4-Dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Chromium (hexavalent)	mg/kg	< 1			1	Pass	
Cyanide (total)	mg/kg	< 5			5	Pass	
Fluoride (Total)	mg/kg	< 100			100	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Molybdenum	mg/kg	< 5			5	Pass	
Nickel	mg/kg	< 5			5	Pass	
Selenium	mg/kg	< 2			2	Pass	
Silver	mg/kg	< 2			2	Pass	
Tin	mg/kg	< 10			10	Pass	

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Zinc	mg/kg	< 5		5	Pass	
Method Blank						
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)	ug/kg	< 5		5	Pass	
Perfluoropentanoic acid (PFPeA)	ug/kg	< 5		5	Pass	
Perfluorohexanoic acid (PFHxA)	ug/kg	< 5		5	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/kg	< 5		5	Pass	
Perfluorooctanoic acid (PFOA)	ug/kg	< 5		5	Pass	
Perfluorononanoic acid (PFNA)	ug/kg	< 5		5	Pass	
Perfluorodecanoic acid (PFDA)	ug/kg	< 5		5	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/kg	< 5		5	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/kg	< 5		5	Pass	
Perfluorotridecanoic acid (PFTTrDA)	ug/kg	< 5		5	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/kg	< 5		5	Pass	
Method Blank						
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)	ug/kg	< 5		5	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/kg	< 5		5	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/kg	< 5		5	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/kg	< 5		5	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/kg	< 5		5	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/kg	< 10		10	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/kg	< 10		10	Pass	
Method Blank						
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)	ug/kg	< 5		5	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/kg	< 5		5	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/kg	< 5		5	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/kg	< 5		5	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	< 5		5	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	< 5		5	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/kg	< 5		5	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/kg	< 5		5	Pass	
Method Blank						
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/kg	< 5		5	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/kg	< 10		10	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/kg	< 5		5	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/kg	< 5		5	Pass	
LCS - % Recovery						
Total Recoverable Hydrocarbons						
TRH C6-C9	%	97		70-130	Pass	
TRH C10-C14	%	109		70-130	Pass	
Naphthalene	%	119		70-130	Pass	
TRH C6-C10	%	96		70-130	Pass	
TRH >C10-C16	%	112		70-130	Pass	
LCS - % Recovery						
Volatile Organics						
1.1-Dichloroethene	%	84		70-130	Pass	
1.1.1-Trichloroethane	%	85		70-130	Pass	
1.2-Dichlorobenzene	%	86		70-130	Pass	
1.2-Dichloroethane	%	96		70-130	Pass	
Benzene	%	103		70-130	Pass	
Ethylbenzene	%	103		70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
m&p-Xylenes	%	105			70-130	Pass	
Toluene	%	112			70-130	Pass	
Trichloroethene	%	98			70-130	Pass	
Xylenes - Total*	%	105			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	109			70-130	Pass	
Acenaphthylene	%	113			70-130	Pass	
Anthracene	%	91			70-130	Pass	
Benz(a)anthracene	%	86			70-130	Pass	
Benzo(a)pyrene	%	93			70-130	Pass	
Benzo(b&i)fluoranthene	%	114			70-130	Pass	
Benzo(g,h,i)perylene	%	83			70-130	Pass	
Benzo(k)fluoranthene	%	88			70-130	Pass	
Chrysene	%	90			70-130	Pass	
Dibenz(a,h)anthracene	%	84			70-130	Pass	
Fluoranthene	%	102			70-130	Pass	
Fluorene	%	96			70-130	Pass	
Indeno(1,2,3-cd)pyrene	%	93			70-130	Pass	
Naphthalene	%	96			70-130	Pass	
Phenanthrene	%	98			70-130	Pass	
Pyrene	%	102			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	113			70-130	Pass	
4,4'-DDD	%	105			70-130	Pass	
4,4'-DDE	%	98			70-130	Pass	
4,4'-DDT	%	88			70-130	Pass	
a-HCH	%	77			70-130	Pass	
Aldrin	%	84			70-130	Pass	
b-HCH	%	91			70-130	Pass	
d-HCH	%	95			70-130	Pass	
Dieldrin	%	110			70-130	Pass	
Endosulfan I	%	98			70-130	Pass	
Endosulfan II	%	104			70-130	Pass	
Endosulfan sulphate	%	93			70-130	Pass	
Endrin	%	94			70-130	Pass	
Endrin aldehyde	%	123			70-130	Pass	
Endrin ketone	%	76			70-130	Pass	
g-HCH (Lindane)	%	85			70-130	Pass	
Heptachlor	%	95			70-130	Pass	
Heptachlor epoxide	%	109			70-130	Pass	
Hexachlorobenzene	%	90			70-130	Pass	
Methoxychlor	%	83			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	87			25-140	Pass	
2,4-Dichlorophenol	%	91			25-140	Pass	
2,4,5-Trichlorophenol	%	73			25-140	Pass	
2,4,6-Trichlorophenol	%	85			25-140	Pass	
2,6-Dichlorophenol	%	89			25-140	Pass	
4-Chloro-3-methylphenol	%	89			25-140	Pass	
Pentachlorophenol	%	73			25-140	Pass	
Tetrachlorophenols - Total	%	67			25-140	Pass	

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery						
Phenols (non-Halogenated)						
2-Cyclohexyl-4,6-dinitrophenol	%	57		25-140	Pass	
2-Methyl-4,6-dinitrophenol	%	61		25-140	Pass	
2-Nitrophenol	%	83		25-140	Pass	
2,4-Dimethylphenol	%	93		25-140	Pass	
2,4-Dinitrophenol	%	62		25-140	Pass	
2-Methylphenol (o-Cresol)	%	72		25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	88		25-140	Pass	
4-Nitrophenol	%	69		25-140	Pass	
Dinoseb	%	62		25-140	Pass	
Phenol	%	67		25-140	Pass	
LCS - % Recovery						
Chromium (hexavalent)	%	100		70-130	Pass	
Cyanide (total)	%	96		70-130	Pass	
Fluoride (Total)	%	84		70-130	Pass	
LCS - % Recovery						
Heavy Metals						
Arsenic	%	109		80-120	Pass	
Cadmium	%	103		80-120	Pass	
Chromium	%	102		80-120	Pass	
Copper	%	107		80-120	Pass	
Lead	%	108		80-120	Pass	
Mercury	%	119		80-120	Pass	
Molybdenum	%	109		80-120	Pass	
Nickel	%	94		80-120	Pass	
Selenium	%	109		80-120	Pass	
Silver	%	108		80-120	Pass	
Tin	%	107		80-120	Pass	
Zinc	%	104		80-120	Pass	
LCS - % Recovery						
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)	%	84		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	82		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	77		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	78		50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	91		50-150	Pass	
Perfluorononanoic acid (PFNA)	%	89		50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	118		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	90		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	94		50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	86		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	88		50-150	Pass	
LCS - % Recovery						
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)	%	89		50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	89		50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	82		50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	86		50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	85		50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	72		50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	75		50-150	Pass	
LCS - % Recovery						
Perfluoroalkyl sulfonic acids (PFSA)						

Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code		
Perfluorobutanesulfonic acid (PFBS)	%	87	50-150	Pass			
Perfluorononanesulfonic acid (PFNS)	%	112	50-150	Pass			
Perfluoropropanesulfonic acid (PFPrS)	%	75	50-150	Pass			
Perfluoropentanesulfonic acid (PFPeS)	%	96	50-150	Pass			
Perfluorohexanesulfonic acid (PFHxS)	%	98	50-150	Pass			
Perfluoroheptanesulfonic acid (PFHpS)	%	105	50-150	Pass			
Perfluorooctanesulfonic acid (PFOS)	%	85	50-150	Pass			
Perfluorodecanesulfonic acid (PFDS)	%	115	50-150	Pass			
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	102	50-150	Pass			
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	102	50-150	Pass			
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	97	50-150	Pass			
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	86	50-150	Pass			
Test	Lab Sample ID	QA Source	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery							
Total Recoverable Hydrocarbons				Result 1			
TRH C6-C9	M22-Ma44741	NCP	%	121	70-130	Pass	
TRH C10-C14	M22-Ma44770	NCP	%	77	70-130	Pass	
Naphthalene	M22-Ma44741	NCP	%	89	70-130	Pass	
TRH C6-C10	M22-Ma44741	NCP	%	108	70-130	Pass	
TRH >C10-C16	M22-Ma44770	NCP	%	72	70-130	Pass	
Spike - % Recovery							
Volatile Organics				Result 1			
1.1-Dichloroethene	M22-Ma44741	NCP	%	102	70-130	Pass	
1.1.1-Trichloroethane	M22-Ma44741	NCP	%	102	70-130	Pass	
1.2-Dichlorobenzene	M22-Ma44741	NCP	%	75	70-130	Pass	
1.2-Dichloroethane	M22-Ma44741	NCP	%	82	70-130	Pass	
Benzene	M22-Ma44741	NCP	%	85	70-130	Pass	
Ethylbenzene	M22-Ma44741	NCP	%	84	70-130	Pass	
m&p-Xylenes	M22-Ma44741	NCP	%	112	70-130	Pass	
o-Xylene	M22-Ma44741	NCP	%	73	70-130	Pass	
Toluene	M22-Ma44741	NCP	%	75	70-130	Pass	
Trichloroethene	M22-Ma44741	NCP	%	72	70-130	Pass	
Xylenes - Total*	M22-Ma44741	NCP	%	99	70-130	Pass	
Spike - % Recovery							
Organochlorine Pesticides				Result 1			
Chlordanes - Total	M22-Ma45847	NCP	%	105	70-130	Pass	
4.4'-DDD	M22-Ma45847	NCP	%	100	70-130	Pass	
4.4'-DDE	M22-Ma45847	NCP	%	74	70-130	Pass	
4.4'-DDT	M22-Ma45847	NCP	%	110	70-130	Pass	
a-HCH	M22-Ma45847	NCP	%	100	70-130	Pass	
Aldrin	M22-Ma45847	NCP	%	102	70-130	Pass	
b-HCH	M22-Ma45847	NCP	%	108	70-130	Pass	
d-HCH	M22-Ma45847	NCP	%	121	70-130	Pass	
Dieldrin	M22-Ma45847	NCP	%	79	70-130	Pass	
Endosulfan I	M22-Ma45847	NCP	%	119	70-130	Pass	
Endosulfan II	M22-Ma45847	NCP	%	125	70-130	Pass	
Endosulfan sulphate	M22-Ma45847	NCP	%	123	70-130	Pass	
Endrin	M22-Ma45847	NCP	%	74	70-130	Pass	
Endrin aldehyde	M22-Ma45847	NCP	%	116	70-130	Pass	
Endrin ketone	M22-Ma45847	NCP	%	109	70-130	Pass	
g-HCH (Lindane)	M22-Ma45847	NCP	%	117	70-130	Pass	
Heptachlor	M22-Ma45847	NCP	%	121	70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor epoxide	M22-Ma45847	NCP	%	71		70-130	Pass	
Hexachlorobenzene	M22-Ma45847	NCP	%	120		70-130	Pass	
Methoxychlor	M22-Ma45847	NCP	%	76		70-130	Pass	
Spike - % Recovery								
Polychlorinated Biphenyls				Result 1				
Aroclor-1016	B22-Ma54557	NCP	%	85		70-130	Pass	
Aroclor-1260	B22-Ma54557	NCP	%	100		70-130	Pass	
Spike - % Recovery								
				Result 1				
Chromium (hexavalent)	M22-Ma44746	NCP	%	70		70-130	Pass	
Spike - % Recovery								
Heavy Metals				Result 1				
Arsenic	M22-Ma45424	NCP	%	97		75-125	Pass	
Cadmium	M22-Ma45424	NCP	%	92		75-125	Pass	
Chromium	M22-Ma45424	NCP	%	128		75-125	Fail	Q08
Copper	M22-Ma45424	NCP	%	109		75-125	Pass	
Lead	M22-Ma45424	NCP	%	128		75-125	Fail	Q08
Mercury	M22-Ma45424	NCP	%	125		75-125	Pass	
Molybdenum	M22-Ma45424	NCP	%	118		75-125	Pass	
Nickel	M22-Ma45424	NCP	%	112		75-125	Pass	
Selenium	M22-Ma45424	NCP	%	91		75-125	Pass	
Silver	M22-Ma45424	NCP	%	97		75-125	Pass	
Tin	M22-Ma45424	NCP	%	115		75-125	Pass	
Zinc	M22-Ma45424	NCP	%	102		75-125	Pass	
Spike - % Recovery								
				Result 1				
Fluoride (Total)	M22-Ma46836	CP	%	88		70-130	Pass	
Spike - % Recovery								
Polycyclic Aromatic Hydrocarbons				Result 1				
Acenaphthene	M22-Ma46837	CP	%	98		70-130	Pass	
Acenaphthylene	M22-Ma46837	CP	%	96		70-130	Pass	
Anthracene	M22-Ma46837	CP	%	109		70-130	Pass	
Benz(a)anthracene	M22-Ma46837	CP	%	109		70-130	Pass	
Benzo(a)pyrene	M22-Ma46837	CP	%	78		70-130	Pass	
Benzo(b&j)fluoranthene	M22-Ma46837	CP	%	90		70-130	Pass	
Benzo(g,h,i)perylene	M22-Ma46837	CP	%	112		70-130	Pass	
Benzo(k)fluoranthene	M22-Ma46837	CP	%	105		70-130	Pass	
Chrysene	M22-Ma46837	CP	%	76		70-130	Pass	
Dibenz(a,h)anthracene	M22-Ma46837	CP	%	100		70-130	Pass	
Fluoranthene	M22-Ma46837	CP	%	84		70-130	Pass	
Fluorene	M22-Ma46837	CP	%	78		70-130	Pass	
Indeno(1,2,3-cd)pyrene	M22-Ma46837	CP	%	75		70-130	Pass	
Naphthalene	M22-Ma46837	CP	%	83		70-130	Pass	
Phenanthrene	M22-Ma46837	CP	%	82		70-130	Pass	
Pyrene	M22-Ma46837	CP	%	87		70-130	Pass	
Spike - % Recovery								
Phenols (Halogenated)				Result 1				
2-Chlorophenol	M22-Ma46837	CP	%	83		30-130	Pass	
2,4-Dichlorophenol	M22-Ma46837	CP	%	74		30-130	Pass	
2,4,5-Trichlorophenol	M22-Ma46837	CP	%	59		30-130	Pass	
2,4,6-Trichlorophenol	M22-Ma46837	CP	%	77		30-130	Pass	
2,6-Dichlorophenol	M22-Ma46837	CP	%	74		30-130	Pass	
4-Chloro-3-methylphenol	M22-Ma46837	CP	%	96		30-130	Pass	
Pentachlorophenol	M22-Ma46837	CP	%	48		30-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Tetrachlorophenols - Total	M22-Ma46837	CP	%	49		30-130	Pass	
Spike - % Recovery								
Phenols (non-Halogenated)				Result 1				
2-Cyclohexyl-4,6-dinitrophenol	M22-Ma46837	CP	%	76		30-130	Pass	
2-Methyl-4,6-dinitrophenol	M22-Ma46837	CP	%	37		30-130	Pass	
2-Nitrophenol	M22-Ma46837	CP	%	74		30-130	Pass	
2,4-Dimethylphenol	M22-Ma46837	CP	%	100		30-130	Pass	
2,4-Dinitrophenol	M22-Ma46837	CP	%	57		30-130	Pass	
2-Methylphenol (o-Cresol)	M22-Ma46837	CP	%	81		30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Ma46837	CP	%	99		30-130	Pass	
4-Nitrophenol	M22-Ma46837	CP	%	63		30-130	Pass	
Dinoseb	M22-Ma46837	CP	%	49		30-130	Pass	
Phenol	M22-Ma46837	CP	%	81		30-130	Pass	
Spike - % Recovery								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1				
Perfluorobutanoic acid (PFBA)	M22-Ma46838	CP	%	92		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma46838	CP	%	92		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma46838	CP	%	84		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma46838	CP	%	84		50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma46838	CP	%	103		50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma46838	CP	%	95		50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma46838	CP	%	117		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma46838	CP	%	95		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma46838	CP	%	100		50-150	Pass	
Perfluorotridecanoic acid (PFTTrDA)	M22-Ma46838	CP	%	91		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma46838	CP	%	90		50-150	Pass	
Spike - % Recovery								
Perfluoroalkyl sulfonamido substances				Result 1				
Perfluorooctane sulfonamide (FOSA)	M22-Ma46838	CP	%	92		50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma46838	CP	%	90		50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma46838	CP	%	97		50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma46838	CP	%	91		50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma46838	CP	%	94		50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma46838	CP	%	80		50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma46838	CP	%	94		50-150	Pass	
Spike - % Recovery								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1				
Perfluorobutanesulfonic acid (PFBS)	M22-Ma46838	CP	%	92		50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma46838	CP	%	105		50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma46838	CP	%	87		50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma46838	CP	%	85		50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma46838	CP	%	93		50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma46838	CP	%	91			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma46838	CP	%	78			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma46838	CP	%	112			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma46838	CP	%	104			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma46838	CP	%	99			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma46838	CP	%	96			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma46838	CP	%	85			50-150	Pass	
Spike - % Recovery									
				Result 1					
Fluoride (Total)	M22-Ma46839	CP	%	87			70-130	Pass	
Spike - % Recovery									
				Result 1					
Cyanide (total)	M22-Ma47600	NCP	%	112			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	M22-Ma53829	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Naphthalene	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	M22-Ma53829	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Hexachlorobutadiene	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trichlorobenzene	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
4-Methyl-2-pentanone (MIBK)	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Allyl chloride	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzene	M22-Ma53829	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Bromobenzene	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromochloromethane	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromodichloromethane	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromoform	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromomethane	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Carbon disulfide	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Carbon Tetrachloride	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chlorobenzene	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloroethane	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloroform	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloromethane	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
cis-1.2-Dichloroethene	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
cis-1.3-Dichloropropene	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibromochloromethane	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibromomethane	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dichlorodifluoromethane	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Ethylbenzene	M22-Ma53829	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Iodomethane	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Isopropyl benzene (Cumene)	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
m&p-Xylenes	M22-Ma53829	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Methylene Chloride	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
o-Xylene	M22-Ma53829	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Styrene	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Tetrachloroethene	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Toluene	M22-Ma53829	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
trans-1.2-Dichloroethene	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
trans-1.3-Dichloropropene	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Trichloroethene	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Trichlorofluoromethane	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Vinyl chloride	M22-Ma53829	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Xylenes - Total*	M22-Ma53829	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Chromium (hexavalent)	M22-Ma46415	NCP	mg/kg	< 1	< 1	<1	30%	Pass
Cyanide (total)	M22-Ma39968	NCP	mg/kg	< 5	< 5	<1	30%	Pass
Fluoride (Total)	M22-Ma46643	NCP	mg/kg	< 100	< 100	<1	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	M22-Ma45424	NCP	mg/kg	< 2	< 2	<1	30%	Pass
Cadmium	M22-Ma45424	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Chromium	M22-Ma45424	NCP	mg/kg	8.0	8.6	7.0	30%	Pass
Copper	M22-Ma45424	NCP	mg/kg	< 5	< 5	<1	30%	Pass
Lead	M22-Ma45424	NCP	mg/kg	6.5	6.6	2.0	30%	Pass
Mercury	M22-Ma45424	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Molybdenum	M22-Ma45424	NCP	mg/kg	< 5	< 5	<1	30%	Pass
Nickel	M22-Ma45424	NCP	mg/kg	9.8	10	6.0	30%	Pass
Selenium	M22-Ma45424	NCP	mg/kg	< 2	< 2	<1	30%	Pass
Silver	M22-Ma45424	NCP	mg/kg	< 2	< 2	<1	30%	Pass
Tin	M22-Ma45424	NCP	mg/kg	< 10	< 10	<1	30%	Pass
Zinc	M22-Ma45424	NCP	mg/kg	14	15	4.0	30%	Pass

Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanoic acid (PFNA)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma46837	CP	ug/kg	< 10	< 10	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma46837	CP	ug/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma46837	CP	ug/kg	< 10	< 10	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma46837	CP	ug/kg	< 5	< 5	<1	30%	Pass

Duplicate								
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD		
TRH C10-C14	M22-Ma46839	CP	mg/kg	< 20	< 20	<1	30%	Pass
TRH C15-C28	M22-Ma46839	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH C29-C36	M22-Ma46839	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH >C10-C16	M22-Ma46839	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH >C16-C34	M22-Ma46839	CP	mg/kg	< 100	< 100	<1	30%	Pass
TRH >C34-C40	M22-Ma46839	CP	mg/kg	< 100	< 100	<1	30%	Pass
Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Acenaphthene	M22-Ma46839	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Acenaphthylene	M22-Ma46839	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Anthracene	M22-Ma46839	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benz(a)anthracene	M22-Ma46839	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(a)pyrene	M22-Ma46839	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(b&j)fluoranthene	M22-Ma46839	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(g,h,i)perylene	M22-Ma46839	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(k)fluoranthene	M22-Ma46839	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chrysene	M22-Ma46839	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibenz(a,h)anthracene	M22-Ma46839	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluoranthene	M22-Ma46839	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluorene	M22-Ma46839	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Indeno(1,2,3-cd)pyrene	M22-Ma46839	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Naphthalene	M22-Ma46839	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	M22-Ma46839	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	M22-Ma46839	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Chlordanes - Total	M22-Ma46839	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
4,4'-DDD	M22-Ma46839	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDE	M22-Ma46839	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDT	M22-Ma46839	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
a-HCH	M22-Ma46839	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Aldrin	M22-Ma46839	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
b-HCH	M22-Ma46839	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
d-HCH	M22-Ma46839	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dieldrin	M22-Ma46839	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan I	M22-Ma46839	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan II	M22-Ma46839	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan sulphate	M22-Ma46839	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin	M22-Ma46839	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin aldehyde	M22-Ma46839	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin ketone	M22-Ma46839	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
g-HCH (Lindane)	M22-Ma46839	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor	M22-Ma46839	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor epoxide	M22-Ma46839	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Hexachlorobenzene	M22-Ma46839	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Methoxychlor	M22-Ma46839	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Toxaphene	M22-Ma46839	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Polychlorinated Biphenyls				Result 1	Result 2	RPD		
Aroclor-1016	M22-Ma46839	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1221	M22-Ma46839	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1232	M22-Ma46839	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1242	M22-Ma46839	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1248	M22-Ma46839	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass

Duplicate								
Polychlorinated Biphenyls				Result 1	Result 2	RPD		
Aroclor-1254	M22-Ma46839	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1260	M22-Ma46839	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Total PCB*	M22-Ma46839	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Duplicate								
Phenols (Halogenated)				Result 1	Result 2	RPD		
2-Chlorophenol	M22-Ma46839	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4-Dichlorophenol	M22-Ma46839	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4,5-Trichlorophenol	M22-Ma46839	CP	mg/kg	< 1	< 1	<1	30%	Pass
2,4,6-Trichlorophenol	M22-Ma46839	CP	mg/kg	< 1	< 1	<1	30%	Pass
2,6-Dichlorophenol	M22-Ma46839	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Chloro-3-methylphenol	M22-Ma46839	CP	mg/kg	< 1	< 1	<1	30%	Pass
Pentachlorophenol	M22-Ma46839	CP	mg/kg	< 1	< 1	<1	30%	Pass
Tetrachlorophenols - Total	M22-Ma46839	CP	mg/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Phenols (non-Halogenated)				Result 1	Result 2	RPD		
2-Cyclohexyl-4,6-dinitrophenol	M22-Ma46839	CP	mg/kg	< 20	< 20	<1	30%	Pass
2-Methyl-4,6-dinitrophenol	M22-Ma46839	CP	mg/kg	< 5	< 5	<1	30%	Pass
2-Nitrophenol	M22-Ma46839	CP	mg/kg	< 1	< 1	<1	30%	Pass
2,4-Dimethylphenol	M22-Ma46839	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4-Dinitrophenol	M22-Ma46839	CP	mg/kg	< 5	< 5	<1	30%	Pass
2-Methylphenol (o-Cresol)	M22-Ma46839	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
3&4-Methylphenol (m&p-Cresol)	M22-Ma46839	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
4-Nitrophenol	M22-Ma46839	CP	mg/kg	< 5	< 5	<1	30%	Pass
Dinoseb	M22-Ma46839	CP	mg/kg	< 20	< 20	<1	30%	Pass
Phenol	M22-Ma46839	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
pH (1:5 Aqueous extract at 25°C as rec.)	M22-Ma46842	CP	pH Units	9.6	9.6	pass	30%	Pass
% Moisture	M22-Ma46842	CP	%	29	27	6.0	30%	Pass

Comments
Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.

Authorised by:

Michael Cassidy	Analytical Services Manager
Emily Rosenberg	Senior Analyst-Metal (VIC)
Joseph Edouard	Senior Analyst-Organic (VIC)
Joseph Edouard	Senior Analyst-PFAS (VIC)
Scott Beddoes	Senior Analyst-Inorganic (VIC)
Vivian Wang	Senior Analyst-Volatile (VIC)



Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.



CHAIN OF CUSTODY RECORD

Eurofins | Environmental Testing | ABN 50 005 085 521

Sydney Laboratory
Unit F3 Bld F 16 Mars Road Lane Cove West NSW 2056
02 8900 8400 EnviroSampleNSW@eurofins.com

Brisbane Laboratory
Unit 1 21 Smallwood Place Murarie QLD 4172
07 3922 4600 EnviroSampleQLD@eurofins.com

Perth Laboratory
Unit 2 91 Leach Highway Kevelake WA 8105
08 9251 8600 EnviroSampleWA@eurofins.com

Melbourne Laboratory
6 Montezey Road Dandenong South VIC 3175
03 8564 5000 EnviroSampleVIC@eurofins.com

Company	AGON Environmental - Tunnel Spoil Testing		Project No	JC0927		Project Manager	Craig Trimbur		Sampler(s)	Will O'Haire - Agon Environmental	
Address	Unit H76, 63-85 Turner St, Port Melbourne VIC 3207		Project Name	WGTP-Tunnel Ref:20220406152354-Eurofin-8		EDD Format	ESdat, EOU/S etc		Esdat		
Contact Name	Craig Trimbur David Lawson		Analyses <small>Where metals are requested, please specify "Total" or "Filtered" SUITE code must be used to select SUITE prep type</small>	Spot Sample Preparation						Handed over by	
Phone No	+61 400 826 907 (Craig) +61 490 411 004 (David)			PFAS Extended Suite - 0.1-5ug/kg		ASLP PH 5 - PFAS 0.01-0.05 ug/l		ASLP Reagent - PFAS 0.01-0.05ug/l		Email for Invoice	finance@agonenviro.com.au LabReports.TST@agonenviro.com.au
Special Directions	Please provide an interim lab report if finalised report has not been provided by 14 days from sample receipt. Please provide eSRN along with other sample receipt documentation.			Suites: WGTP-PCB/PAH/Phenols/OCPI/PCPI/VOC/Vinyl Chloride/ Metals (As, Cd, Cr, Cu, Ni, Pb, Hg, Ag, Sr, Mo, Se, Zn)/Cr6+ CN/ Total Fluoride/ PH						Email for Results	LabReports.TST@agonenviro.com.au agonenvironmental@esdat.com.au motherhublabresults1@wgtp.com.au Amrit.Kaur@agle-analytics.com.au
Purchase Order										Containers	Change container type & size if necessary
Quote ID No	Agon WGTP TST								Required Turnaround Time (TAT)	Default will be 5 days if not ticked.	
No	Client Sample ID	Sampled Date/Time dd/mm/yy hh:mm	Matrix Solid (S) Water (W)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Containers	Required Turnaround Time (TAT)
										500mL Plastic	Overnight (reporting by 8am) <input type="checkbox"/>
										250mL Plastic	Same day <input type="checkbox"/>
										125mL Plastic	1 day <input type="checkbox"/>
										200mL Amber Glass	2 days <input checked="" type="checkbox"/>
										40mL VOA vial	3 days <input type="checkbox"/>
										500mL PFAS Bottle	5 days (Standard) <input type="checkbox"/>
										Jar (Glass or HDPE)	Other (<input type="checkbox"/>)
										Other (Asbestos AS4984, WA Guidelines)	Sample Comments / Dangerous Goods Hazard Warning
1	SX_OB_20220406_13_39_SS_Primary_EUF	6/04/22	S	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			1
2	SX_OB_20220406_13_41_SS_Duplicate_EUF	6/04/22	S	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			1
3	SX_OB_20220406_13_45_SS_Primary_EUF	6/04/22	S	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			1
4	SX_OB_20220406_13_46_SS_Primary_EUF	6/04/22	S	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			1
5	SX_OB_20220406_13_48_SS_Primary_EUF	6/04/22	S	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			1
6	SX_OB_20220406_13_50_SS_Primary_EUF	6/04/22	S	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			1
7	SX_OB_20220406_13_54_SS_Triplicate_EUF	6/04/22	S	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			1
8	SX_OB_20220406_13_55_SS_Primary_EUF	6/04/22	S	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			1
9	SX_OB_20220406_13_58_SR_Rinsate_EUF	6/04/22	W			<input checked="" type="checkbox"/>					1
10	SX_OB_20220406_14_02_SB_Blank_EUF	6/04/22	W			<input checked="" type="checkbox"/>					1
11											
12											
13											
Total Counts				5	5	10	5	5			
Method of Shipment	<input checked="" type="checkbox"/> Courier		<input type="checkbox"/> Hand Delivered		<input type="checkbox"/> Postal		Name		Will O	Signature	W
Laboratory Use Only	Received By	<i>[Signature]</i>	SYD BNE MEL PER ADL NTL DRW	Signature	<i>[Signature]</i>	Date	6/4/22	Time	5:27 PM	Temperature	18.7°C
	Received By		SYD BNE MEL PER ADL NTL DRW	Signature		Date	6/4/22	Time		Report No	877800

877800
Jaker

Agon Environmental Pty Ltd - VIC
3/224 Glen Osmond Road
Fullarton
SA 5063



NATA Accredited
Accreditation Number 1261
Site Number 1254

Accredited for compliance with ISO/IEC 17025 – Testing
NATA is a signatory to the ILAC Mutual Recognition
Arrangement for the mutual recognition of the
equivalence of testing, medical testing, calibration,
inspection, proficiency testing scheme providers and
reference materials producers reports and certificates.

Attention: **David Lawson**

Report **877800-L**
Project name **20220406152354-Eurofin-8**
Project ID **JC0927**
Received Date **Apr 06, 2022**

Client Sample ID			SX_OB_20220 406_13_39_SS _Primary_EUF	SX_OB_20220 406_13_41_SS _Duplicate_EU F	SX_OB_20220 406_13_45_SS _Primary_EUF	SX_OB_20220 406_13_46_SS _Primary_EUF
Sample Matrix			AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0
Eurofins Sample No.			M22- Ap0012328	M22- Ap0012329	M22- Ap0012330	M22- Ap0012331
Date Sampled			Apr 06, 2022	Apr 06, 2022	Apr 06, 2022	Apr 06, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.0	5.0	5.0	5.0
pH (off)	0.1	pH Units	5.0	5.0	5.1	5.1
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	90	93	65	75
13C5-PFPeA (surr.)	1	%	96	106	77	86
13C5-PFHxA (surr.)	1	%	91	96	77	82
13C4-PFHpA (surr.)	1	%	85	89	73	73
13C8-PFOA (surr.)	1	%	74	77	78	72
13C5-PFNA (surr.)	1	%	74	77	71	59
13C6-PFDA (surr.)	1	%	74	79	74	54
13C2-PFUnDA (surr.)	1	%	75	66	74	39
13C2-PFDoDA (surr.)	1	%	74	63	57	21
13C2-PFTeDA (surr.)	1	%	47	26	26	16

Client Sample ID			SX_OB_20220 406_13_39_SS _Primary_EUF	SX_OB_20220 406_13_41_SS _Duplicate_EU F	SX_OB_20220 406_13_45_SS _Primary_EUF	SX_OB_20220 406_13_46_SS _Primary_EUF
Sample Matrix			AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0
Eurofins Sample No.			M22- Ap0012328	M22- Ap0012329	M22- Ap0012330	M22- Ap0012331
Date Sampled			Apr 06, 2022	Apr 06, 2022	Apr 06, 2022	Apr 06, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	63	66	76	61
D3-N-MeFOSA (surr.)	1	%	117	93	62	42
D5-N-EtFOSA (surr.)	1	%	123	93	62	39
D7-N-MeFOSE (surr.)	1	%	89	82	63	54
D9-N-EtFOSE (surr.)	1	%	85	76	68	53
D5-N-EtFOSAA (surr.)	1	%	45	43	21	13
D3-N-MeFOSAA (surr.)	1	%	53	45	22	18
Perfluoroalkyl sulfonic acids (PFSA)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	103	103	86	80
18O2-PFHxS (surr.)	1	%	72	87	79	68
13C8-PFOS (surr.)	1	%	74	81	80	55
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	66	65	41	45
13C2-6:2 FTSA (surr.)	1	%	81	81	55	60
13C2-8:2 FTSA (surr.)	1	%	75	69	67	53
13C2-10:2 FTSA (surr.)	1	%	73	61	69	28
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220 406_13_48_SS _Primary_EUF	SX_OB_20220 406_13_50_SS _Primary_EUF	SX_OB_20220 406_13_54_SS _Triplicate_EU F	SX_OB_20220 406_13_55_SS _Primary_EUF
Sample Matrix			AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0
Eurofins Sample No.			M22- Ap0012332	M22- Ap0012333	M22- Ap0012334	M22- Ap0012335
Date Sampled			Apr 06, 2022	Apr 06, 2022	Apr 06, 2022	Apr 06, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.0	5.0	5.0	5.0
pH (off)	0.1	pH Units	5.2	5.0	5.0	5.0
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	67	61	83	101
13C5-PFPeA (surr.)	1	%	66	72	92	118
13C5-PFHxA (surr.)	1	%	71	67	92	91
13C4-PFHpA (surr.)	1	%	66	66	89	84
13C8-PFOA (surr.)	1	%	66	65	83	98
13C5-PFNA (surr.)	1	%	62	75	96	86
13C6-PFDA (surr.)	1	%	63	70	93	73
13C2-PFUnDA (surr.)	1	%	58	121	150	78
13C2-PFDoDA (surr.)	1	%	46	98	137	61
13C2-PFTTeDA (surr.)	1	%	33	30	43	65
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	65	123	134	91
D3-N-MeFOSA (surr.)	1	%	56	71	91	39
D5-N-EtFOSA (surr.)	1	%	63	65	87	38
D7-N-MeFOSE (surr.)	1	%	61	99	148	72
D9-N-EtFOSE (surr.)	1	%	65	110	117	75
D5-N-EtFOSAA (surr.)	1	%	16	67	103	56
D3-N-MeFOSAA (surr.)	1	%	19	52	84	73

Client Sample ID			SX_OB_20220 406_13_48_SS _Primary_EUF	SX_OB_20220 406_13_50_SS _Primary_EUF	SX_OB_20220 406_13_54_SS _Triplicate_EU F	SX_OB_20220 406_13_55_SS _Primary_EUF
Sample Matrix			AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0	AUS Leachate - pH 5.0
Eurofins Sample No.			M22- Ap0012332	M22- Ap0012333	M22- Ap0012334	M22- Ap0012335
Date Sampled			Apr 06, 2022	Apr 06, 2022	Apr 06, 2022	Apr 06, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFASs)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	71	71	91	93
18O2-PFHxS (surr.)	1	%	60	63	90	84
13C8-PFOS (surr.)	1	%	60	59	81	78
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	37	95	127	55
13C2-6:2 FTSA (surr.)	1	%	53	93	142	77
13C2-8:2 FTSA (surr.)	1	%	51	101	141	61
13C2-10:2 FTSA (surr.)	1	%	44	110	120	61
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220 406_13_39_SS _Primary_EUF	SX_OB_20220 406_13_41_SS _Duplicate_EU F	SX_OB_20220 406_13_45_SS _Primary_EUF	SX_OB_20220 406_13_46_SS _Primary_EUF
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22- Ap0012336	M22- Ap0012337	M22- Ap0012338	M22- Ap0012339
Date Sampled			Apr 06, 2022	Apr 06, 2022	Apr 06, 2022	Apr 06, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	6.4	6.4	6.4	6.4
pH (off)	0.1	pH Units	6.3	9.1	9.1	9.1

Client Sample ID			SX_OB_20220 406_13_39_SS _Primary_EUF	SX_OB_20220 406_13_41_SS _Duplicate_EU F	SX_OB_20220 406_13_45_SS _Primary_EUF	SX_OB_20220 406_13_46_SS _Primary_EUF
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22- Ap0012336	M22- Ap0012337	M22- Ap0012338	M22- Ap0012339
Date Sampled			Apr 06, 2022	Apr 06, 2022	Apr 06, 2022	Apr 06, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	98	65	62	75
13C5-PFPeA (surr.)	1	%	104	85	63	76
13C5-PFHxA (surr.)	1	%	87	72	71	84
13C4-PFHpA (surr.)	1	%	83	68	70	80
13C8-PFOA (surr.)	1	%	104	70	70	78
13C5-PFNA (surr.)	1	%	88	67	65	67
13C6-PFDA (surr.)	1	%	85	67	71	61
13C2-PFUnDA (surr.)	1	%	79	58	67	49
13C2-PFDoDA (surr.)	1	%	58	39	44	29
13C2-PFTeDA (surr.)	1	%	51	15	11	23
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	94	69	68	59
D3-N-MeFOSA (surr.)	1	%	31	60	51	46
D5-N-EtFOSA (surr.)	1	%	32	60	47	46
D7-N-MeFOSE (surr.)	1	%	67	64	50	48
D9-N-EtFOSE (surr.)	1	%	70	63	51	48
D5-N-EtFOSAA (surr.)	1	%	84	21	26	19
D3-N-MeFOSAA (surr.)	1	%	101	22	26	21
Perfluoroalkyl sulfonic acids (PFSA)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01

Client Sample ID			SX_OB_20220 406_13_39_SS _Primary_EUF	SX_OB_20220 406_13_41_SS _Duplicate_EU F	SX_OB_20220 406_13_45_SS _Primary_EUF	SX_OB_20220 406_13_46_SS _Primary_EUF
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22- Ap0012336	M22- Ap0012337	M22- Ap0012338	M22- Ap0012339
Date Sampled			Apr 06, 2022	Apr 06, 2022	Apr 06, 2022	Apr 06, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFASs)						
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	96	82	80	84
18O2-PFHxS (surr.)	1	%	88	77	71	76
13C8-PFOS (surr.)	1	%	81	70	77	66
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	54	36	34	41
13C2-6:2 FTSA (surr.)	1	%	67	47	49	52
13C2-8:2 FTSA (surr.)	1	%	68	52	53	52
13C2-10:2 FTSA (surr.)	1	%	51	41	58	39
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220 406_13_48_SS _Primary_EUF	SX_OB_20220 406_13_50_SS _Primary_EUF	SX_OB_20220 406_13_54_SS _Triplicate_EU F	SX_OB_20220 406_13_55_SS _Primary_EUF
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22- Ap0012340	M22- Ap0012341	M22- Ap0012342	M22- Ap0012343
Date Sampled			Apr 06, 2022	Apr 06, 2022	Apr 06, 2022	Apr 06, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	6.4	6.4	6.4	6.4
pH (off)	0.1	pH Units	9.1	7.6	7.2	7.3
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01

Client Sample ID			SX_OB_20220 406_13_48_SS _Primary_EUF	SX_OB_20220 406_13_50_SS _Primary_EUF	SX_OB_20220 406_13_54_SS _Triplicate_EU F	SX_OB_20220 406_13_55_SS _Primary_EUF
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22- Ap0012340	M22- Ap0012341	M22- Ap0012342	M22- Ap0012343
Date Sampled			Apr 06, 2022	Apr 06, 2022	Apr 06, 2022	Apr 06, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTeDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	66	97	99	100
13C5-PFPeA (surr.)	1	%	78	110	112	122
13C5-PFHxA (surr.)	1	%	70	89	93	91
13C4-PFHpA (surr.)	1	%	70	85	86	85
13C8-PFOA (surr.)	1	%	76	102	101	102
13C5-PFNA (surr.)	1	%	66	98	93	95
13C6-PFDA (surr.)	1	%	72	92	87	89
13C2-PFUnDA (surr.)	1	%	65	88	81	82
13C2-PFDoDA (surr.)	1	%	39	63	61	63
13C2-PFTeDA (surr.)	1	%	22	49	55	49
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	69	100	97	98
D3-N-MeFOSA (surr.)	1	%	35	38	33	18
D5-N-EtFOSA (surr.)	1	%	26	35	32	17
D7-N-MeFOSE (surr.)	1	%	53	73	66	71
D9-N-EtFOSE (surr.)	1	%	44	70	70	71
D5-N-EtFOSAA (surr.)	1	%	21	109	94	100
D3-N-MeFOSAA (surr.)	1	%	21	116	113	118
Perfluoroalkyl sulfonic acids (PFSA)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	74	97	96	97
18O2-PFHxS (surr.)	1	%	66	86	86	92
13C8-PFOS (surr.)	1	%	79	92	85	88

Client Sample ID			SX_OB_20220 406_13_48_SS _Primary_EUF	SX_OB_20220 406_13_50_SS _Primary_EUF	SX_OB_20220 406_13_54_SS _Triplicate_EU F	SX_OB_20220 406_13_55_SS _Primary_EUF
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22- Ap0012340	M22- Ap0012341	M22- Ap0012342	M22- Ap0012343
Date Sampled			Apr 06, 2022	Apr 06, 2022	Apr 06, 2022	Apr 06, 2022
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	38	54	55	58
13C2-6:2 FTSA (surr.)	1	%	54	71	70	74
13C2-8:2 FTSA (surr.)	1	%	59	77	65	73
13C2-10:2 FTSA (surr.)	1	%	58	59	56	55
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
AUS Leaching Procedure			
pH (initial) - Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes	Melbourne	Apr 07, 2022	0 Days
pH (Leachate fluid) - Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes	Melbourne	Apr 07, 2022	0 Days
pH (off) - Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes	Melbourne	Apr 07, 2022	0 Days
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Apr 07, 2022	28 Days
Perfluoroalkyl sulfonamido substances - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Apr 07, 2022	28 Days
Perfluoroalkyl sulfonic acids (PFASs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Apr 07, 2022	28 Days
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Apr 07, 2022	28 Days
PFASs Summations - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Apr 06, 2022	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	Apr 6, 2022 5:29 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	877800	Due:	Apr 8, 2022
Project Name:	20220406152354-Eurofin-8	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID				
1	SX_OB_20220406_13_39_S_S_Primary_EU_F	Apr 06, 2022	1:39PM	Soil	M22-Ap0012318		X	X	X
2	SX_OB_20220406_13_41_S_S_Duplicate_EU_F	Apr 06, 2022	1:41PM	Soil	M22-Ap0012319		X	X	X
3	SX_OB_20220406_13_45_S_S_Primary_EU_F	Apr 06, 2022	1:45PM	Soil	M22-Ap0012320		X	X	X

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	Apr 6, 2022 5:29 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	877800	Due:	Apr 8, 2022
Project Name:	20220406152354-Eurofin-8	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
4	SX_OB_20220406_13_46_S_S_Primary_EU_F	Apr 06, 2022	1:46PM	Soil	M22-Ap0012321		X	X	X
5	SX_OB_20220406_13_48_S_S_Primary_EU_F	Apr 06, 2022	1:48PM	Soil	M22-Ap0012322		X	X	X
6	SX_OB_20220406_13_50_S_S_Primary_EU_F	Apr 06, 2022	1:50PM	Soil	M22-Ap0012323		X	X	X
7	SX_OB_20220406_13_54_S	Apr 06, 2022	1:54PM	Soil	M22-Ap0012324		X	X	X

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063
Project Name: 20220406152354-Eurofin-8
Project ID: JC0927

Order No.:
Report #: 877800
Phone: 08 8338 1009
Fax:

Received: Apr 6, 2022 5:29 PM
Due: Apr 8, 2022
Priority: 2 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Triplicate_EUF								
8	SX_OB_20220406_13_55_S_S_Primary_EUF	Apr 06, 2022	1:55PM	Soil	M22-Ap0012325		X	X	X
9	SX_OB_20220406_13_58_S_R_Rinsate_EUF	Apr 06, 2022	1:58PM	Water	M22-Ap0012326			X	
10	SX_OB_20220406_14_02_S_B_Blank_EUF	Apr 06, 2022	2:02PM	Water	M22-Ap0012327			X	
11	SX_OB_20220	Apr 06, 2022	1:39PM	AUS Leachate	M22-	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	Apr 6, 2022 5:29 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	877800	Due:	Apr 8, 2022
Project Name:	20220406152354-Eurofin-8	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	406_13_39_S S_Primary_EU F			- pH 5.0	Ap0012328				
12	SX_OB_20220 406_13_41_S S_Duplicate_E UF	Apr 06, 2022	1:41PM	AUS Leachate - pH 5.0	M22- Ap0012329	X		X	
13	SX_OB_20220 406_13_45_S S_Primary_EU F	Apr 06, 2022	1:45PM	AUS Leachate - pH 5.0	M22- Ap0012330	X		X	
14	SX_OB_20220 406_13_46_S S_Primary_EU	Apr 06, 2022	1:46PM	AUS Leachate - pH 5.0	M22- Ap0012331	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	Apr 6, 2022 5:29 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	877800	Due:	Apr 8, 2022
Project Name:	20220406152354-Eurofin-8	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	F								
15	SX_OB_20220406_13_48_S_S_Primary_EU_F	Apr 06, 2022	1:48PM	AUS Leachate - pH 5.0	M22-Ap0012332	X		X	
16	SX_OB_20220406_13_50_S_S_Primary_EU_F	Apr 06, 2022	1:50PM	AUS Leachate - pH 5.0	M22-Ap0012333	X		X	
17	SX_OB_20220406_13_54_S_S_Triplicate_EUF	Apr 06, 2022	1:54PM	AUS Leachate - pH 5.0	M22-Ap0012334	X		X	
18	SX_OB_20220	Apr 06, 2022	1:55PM	AUS Leachate	M22-	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	Apr 6, 2022 5:29 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	877800	Due:	Apr 8, 2022
Project Name:	20220406152354-Eurofin-8	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	406_13_55_S S_Primary_EU F			- pH 5.0	Ap0012335				
19	SX_OB_20220 406_13_39_S S_Primary_EU F	Apr 06, 2022	1:39PM	AUS Leachate - Reagent Water	M22- Ap0012336	X		X	
20	SX_OB_20220 406_13_41_S S_Duplicate_E UF	Apr 06, 2022	1:41PM	AUS Leachate - Reagent Water	M22- Ap0012337	X		X	
21	SX_OB_20220 406_13_45_S S_Primary_EU	Apr 06, 2022	1:45PM	AUS Leachate - Reagent Water	M22- Ap0012338	X		X	

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063
Project Name: 20220406152354-Eurofin-8
Project ID: JC0927

Order No.:
Report #: 877800
Phone: 08 8338 1009
Fax:

Received: Apr 6, 2022 5:29 PM
Due: Apr 8, 2022
Priority: 2 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	F								
22	SX_OB_20220406_13_46_S_S_Primary_EU_F	Apr 06, 2022	1:46PM	AUS Leachate - Reagent Water	M22-Ap0012339	X		X	
23	SX_OB_20220406_13_48_S_S_Primary_EU_F	Apr 06, 2022	1:48PM	AUS Leachate - Reagent Water	M22-Ap0012340	X		X	
24	SX_OB_20220406_13_50_S_S_Primary_EU_F	Apr 06, 2022	1:50PM	AUS Leachate - Reagent Water	M22-Ap0012341	X		X	
25	SX_OB_20220	Apr 06, 2022	1:54PM	AUS Leachate	M22-	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	Apr 6, 2022 5:29 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	877800	Due:	Apr 8, 2022
Project Name:	20220406152354-Eurofin-8	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	406_13_54_S S_Triplicate_E UF			- Reagent Water	Ap0012342				
26	SX_OB_20220 406_13_55_S S_Primary_EU F	Apr 06, 2022	1:55PM	AUS Leachate - Reagent Water	M22- Ap0012343	X		X	
Test Counts						16	8	26	8

Internal Quality Control Review and Glossary

General

- Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
- All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
- SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- Samples were analysed on an 'as received' basis.
- Information identified on this report with blue colour, indicates data provided by customer that may have an impact on the results.
- This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	mg/L: milligrams per litre	µg/L: micrograms per litre
ppm: parts per million	ppb: parts per billion	%: Percentage
org/100 mL: Organisms per 100 millilitres	NTU: Nephelometric Turbidity Units	MPN/100 mL: Most Probable Number of organisms per 100 millilitres

Terms

APHA	American Public Health Association
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
TBTO	Tributyltin oxide (<i>bis</i> -tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment however free tributyltin was measured and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 5.4
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR: No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

QC Data General Comments

- Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
- Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
- For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
- Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Method Blank						
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05		0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01		0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01		0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.01		0.01	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01		0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01		0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01		0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01		0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01		0.01	Pass	
Perfluorotridecanoic acid (PFTTrDA)	ug/L	< 0.01		0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01		0.01	Pass	
Method Blank						
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05		0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05		0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05		0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/L	< 0.05		0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/L	< 0.05		0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05		0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05		0.05	Pass	
Method Blank						
Perfluoroalkyl sulfonic acids (PFASs)						
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01		0.01	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/L	< 0.01		0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/L	< 0.01		0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01		0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01		0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01		0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01		0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/L	< 0.01		0.01	Pass	
Method Blank						
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.01		0.01	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/L	< 0.05		0.05	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01		0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01		0.01	Pass	
LCS - % Recovery						
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)	%	104		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	110		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	110		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	103		50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	111		50-150	Pass	
Perfluorononanoic acid (PFNA)	%	101		50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	113		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	107		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	121		50-150	Pass	
Perfluorotridecanoic acid (PFTTrDA)	%	103		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	104		50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code		
LCS - % Recovery									
Perfluoroalkyl sulfonamido substances									
Perfluorooctane sulfonamide (FOSA)	%	129			50-150	Pass			
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	120			50-150	Pass			
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	142			50-150	Pass			
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	90			50-150	Pass			
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	116			50-150	Pass			
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	101			50-150	Pass			
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	88			50-150	Pass			
LCS - % Recovery									
Perfluoroalkyl sulfonic acids (PFSA)									
Perfluorobutanesulfonic acid (PFBS)	%	112			50-150	Pass			
Perfluorononanesulfonic acid (PFNS)	%	120			50-150	Pass			
Perfluoropropanesulfonic acid (PFPrS)	%	124			50-150	Pass			
Perfluoropentanesulfonic acid (PFPeS)	%	120			50-150	Pass			
Perfluorohexanesulfonic acid (PFHxS)	%	122			50-150	Pass			
Perfluoroheptanesulfonic acid (PFHpS)	%	138			50-150	Pass			
Perfluorooctanesulfonic acid (PFOS)	%	115			50-150	Pass			
Perfluorodecanesulfonic acid (PFDS)	%	91			50-150	Pass			
LCS - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)									
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	90			50-150	Pass			
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	97			50-150	Pass			
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	84			50-150	Pass			
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	74			50-150	Pass			
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)									
				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-Ap0012328	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ap0012328	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ap0012328	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ap0012328	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ap0012328	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ap0012328	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ap0012328	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ap0012328	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ap0012328	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTTrDA)	M22-Ap0012328	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTTeDA)	M22-Ap0012328	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances									
				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ap0012328	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ap0012328	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ap0012328	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ap0012328	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ap0012328	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ap0012328	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ap0012328	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-Ap0012328	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-Ap0012328	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-Ap0012328	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-Ap0012328	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-Ap0012328	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ap0012328	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-Ap0012328	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-Ap0012328	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ap0012328	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ap0012328	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ap0012328	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ap0012328	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	M22-Ap0012340	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	M22-Ap0012340	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	M22-Ap0012340	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	M22-Ap0012340	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	M22-Ap0012340	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanoic acid (PFNA)	M22-Ap0012340	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	M22-Ap0012340	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	M22-Ap0012340	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	M22-Ap0012340	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	M22-Ap0012340	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	M22-Ap0012340	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-Ap0012340	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ap0012340	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ap0012340	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ap0012340	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ap0012340	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ap0012340	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ap0012340	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSA)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-Ap0012340	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-Ap0012340	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-Ap0012340	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-Ap0012340	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-Ap0012340	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ap0012340	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-Ap0012340	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-Ap0012340	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ap0012340	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ap0012340	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ap0012340	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ap0012340	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Comments
Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	No
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
C01	Leachate Fluid Key: 1 - pH 5.0; 2 - pH 2.9; 3 - pH 9.2; 4 - Reagent (DI) water; 5 - Client sample, 6 - other
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).

Authorised by:

Michael Cassidy	Analytical Services Manager
Mary Makarios	Senior Analyst (NSW)
Joseph Edouard	Senior Analyst (VIC)
Catherine Wilson	Senior Analyst (VIC)



Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

Agon Environmental Pty Ltd - VIC
3/224 Glen Osmond Road
Fullarton
SA 5063



NATA Accredited
Accreditation Number 1261
Site Number 1254

Accredited for compliance with ISO/IEC 17025 – Testing
NATA is a signatory to the ILAC Mutual Recognition
Arrangement for the mutual recognition of the
equivalence of testing, medical testing, calibration,
inspection, proficiency testing scheme providers and
reference materials producers reports and certificates.

Attention: **David Lawson**

Report **877800-S**
Project name **20220406152354-Eurofin-8**
Project ID **JC0927**
Received Date **Apr 06, 2022**

Client Sample ID			SX_OB_20220 406_13_39_SS _Primary_EUF	SX_OB_20220 406_13_41_SS _Duplicate_EU F	SX_OB_20220 406_13_45_SS _Primary_EUF	SX_OB_20220 406_13_46_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0012318	M22- Ap0012319	M22- Ap0012320	M22- Ap0012321
Date Sampled			Apr 06, 2022	Apr 06, 2022	Apr 06, 2022	Apr 06, 2022
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	36
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
Volatile Organics						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			SX_OB_20220 406_13_39_SS _Primary_EUF	SX_OB_20220 406_13_41_SS _Duplicate_EU F	SX_OB_20220 406_13_45_SS _Primary_EUF	SX_OB_20220 406_13_46_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0012318	M22- Ap0012319	M22- Ap0012320	M22- Ap0012321
Date Sampled			Apr 06, 2022	Apr 06, 2022	Apr 06, 2022	Apr 06, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	53	96	80	67
Toluene-d8 (surr.)	1	%	96	98	63	61
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			SX_OB_20220 406_13_39_SS _Primary_EUF	SX_OB_20220 406_13_41_SS _Duplicate_EU F	SX_OB_20220 406_13_45_SS _Primary_EUF	SX_OB_20220 406_13_46_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0012318	M22- Ap0012319	M22- Ap0012320	M22- Ap0012321
Date Sampled			Apr 06, 2022	Apr 06, 2022	Apr 06, 2022	Apr 06, 2022
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	75	72	72	74
p-Terphenyl-d14 (surr.)	1	%	84	67	73	74
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchloroendate (surr.)	1	%	113	92	104	93
Tetrachloro-m-xylene (surr.)	1	%	119	96	107	96

Client Sample ID			SX_OB_20220 406_13_39_SS _Primary_EUF	SX_OB_20220 406_13_41_SS _Duplicate_EU F	SX_OB_20220 406_13_45_SS _Primary_EUF	SX_OB_20220 406_13_46_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0012318	M22- Ap0012319	M22- Ap0012320	M22- Ap0012321
Date Sampled			Apr 06, 2022	Apr 06, 2022	Apr 06, 2022	Apr 06, 2022
Test/Reference	LOR	Unit				
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchloroendate (surr.)	1	%	113	92	104	93
Tetrachloro-m-xylene (surr.)	1	%	119	96	107	96
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4,5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2,4,6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2,6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4,6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4,6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2,4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	59	51	53	40
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)						
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Cyanide (total)						
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)						
Fluoride (Total)	100	mg/kg	490	< 100	< 100	< 100
pH (1:5 Aqueous extract at 25°C as rec.)						
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	9.4	9.2	9.3	9.1
% Moisture						
% Moisture	1	%	27	21	23	19
Heavy Metals						
Arsenic	2	mg/kg	48	41	39	50
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	180	160	140	130
Copper	5	mg/kg	96	85	72	68
Lead	5	mg/kg	6.1	5.2	5.0	< 5
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220 406_13_39_SS _Primary_EUF	SX_OB_20220 406_13_41_SS _Duplicate_EU F	SX_OB_20220 406_13_45_SS _Primary_EUF	SX_OB_20220 406_13_46_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0012318	M22- Ap0012319	M22- Ap0012320	M22- Ap0012321
Date Sampled			Apr 06, 2022	Apr 06, 2022	Apr 06, 2022	Apr 06, 2022
Test/Reference	LOR	Unit				
Heavy Metals						
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	280	280	220	240
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	180	190	140	140
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanoic acid (PFNA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTrDA) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	95	101	96	100
13C5-PFPeA (surr.)	1	%	90	92	95	97
13C5-PFHxA (surr.)	1	%	91	90	85	89
13C4-PFHpA (surr.)	1	%	80	90	88	90
13C8-PFOA (surr.)	1	%	90	93	90	101
13C5-PFNA (surr.)	1	%	81	60	50	64
13C6-PFDA (surr.)	1	%	94	78	94	97
13C2-PFUnDA (surr.)	1	%	118	109	115	112
13C2-PFDoDA (surr.)	1	%	88	101	91	98
13C2-PFTeDA (surr.)	1	%	81	108	109	112
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	10	ug/kg	< 10	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	10	ug/kg	< 10	< 10	< 10	< 10
13C8-FOSA (surr.)	1	%	12	102	98	104
D3-N-MeFOSA (surr.)	1	%	116	86	84	81
D5-N-EtFOSA (surr.)	1	%	119	102	98	109
D7-N-MeFOSE (surr.)	1	%	101	104	97	96
D9-N-EtFOSE (surr.)	1	%	81	93	85	96
D5-N-EtFOSAA (surr.)	1	%	158	135	97	103
D3-N-MeFOSAA (surr.)	1	%	90	128	115	93

Client Sample ID			SX_OB_20220 406_13_39_SS _Primary_EUF	SX_OB_20220 406_13_41_SS _Duplicate_EU F	SX_OB_20220 406_13_45_SS _Primary_EUF	SX_OB_20220 406_13_46_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0012318	M22- Ap0012319	M22- Ap0012320	M22- Ap0012321
Date Sampled			Apr 06, 2022	Apr 06, 2022	Apr 06, 2022	Apr 06, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFASs)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	77	86	81	85
18O2-PFHxS (surr.)	1	%	87	92	94	99
13C8-PFOS (surr.)	1	%	74	83	65	85
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	68	57	59	60
13C2-6:2 FTSA (surr.)	1	%	38	72	72	75
13C2-8:2 FTSA (surr.)	1	%	107	93	87	97
13C2-10:2 FTSA (surr.)	1	%	54	141	122	131
PFASs Summations						
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50	< 50	< 50

Client Sample ID			SX_OB_20220 406_13_48_SS _Primary_EUF	SX_OB_20220 406_13_50_SS _Primary_EUF	SX_OB_20220 406_13_54_SS _Triplicate_EU F	SX_OB_20220 406_13_55_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0012322	M22- Ap0012323	M22- Ap0012324	M22- Ap0012325
Date Sampled			Apr 06, 2022	Apr 06, 2022	Apr 06, 2022	Apr 06, 2022
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	38	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20

Client Sample ID			SX_OB_20220 406_13_48_SS _Primary_EUF	SX_OB_20220 406_13_50_SS _Primary_EUF	SX_OB_20220 406_13_54_SS _Triplicate_EU F	SX_OB_20220 406_13_55_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0012322	M22- Ap0012323	M22- Ap0012324	M22- Ap0012325
Date Sampled			Apr 06, 2022	Apr 06, 2022	Apr 06, 2022	Apr 06, 2022
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
Volatile Organics						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			SX_OB_20220 406_13_48_SS _Primary_EUF	SX_OB_20220 406_13_50_SS _Primary_EUF	SX_OB_20220 406_13_54_SS _Triplicate_EU F	SX_OB_20220 406_13_55_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0012322	M22- Ap0012323	M22- Ap0012324	M22- Ap0012325
Date Sampled			Apr 06, 2022	Apr 06, 2022	Apr 06, 2022	Apr 06, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	64	57	62	59
Toluene-d8 (surr.)	1	%	57	64	55	66
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	89	115	65	111
p-Terphenyl-d14 (surr.)	1	%	91	107	69	113

Client Sample ID			SX_OB_20220 406_13_48_SS _Primary_EUF	SX_OB_20220 406_13_50_SS _Primary_EUF	SX_OB_20220 406_13_54_SS _Triplicate_EU F	SX_OB_20220 406_13_55_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0012322	M22- Ap0012323	M22- Ap0012324	M22- Ap0012325
Date Sampled			Apr 06, 2022	Apr 06, 2022	Apr 06, 2022	Apr 06, 2022
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchloroendate (surr.)	1	%	137	64	106	58
Tetrachloro-m-xylene (surr.)	1	%	120	129	95	140
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchloroendate (surr.)	1	%	137	64	106	58
Tetrachloro-m-xylene (surr.)	1	%	120	129	95	140
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4,5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2,4,6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2,6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1

Client Sample ID			SX_OB_20220 406_13_48_SS _Primary_EUF	SX_OB_20220 406_13_50_SS _Primary_EUF	SX_OB_20220 406_13_54_SS _Triplicate_EU F	SX_OB_20220 406_13_55_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0012322	M22- Ap0012323	M22- Ap0012324	M22- Ap0012325
Date Sampled			Apr 06, 2022	Apr 06, 2022	Apr 06, 2022	Apr 06, 2022
Test/Reference	LOR	Unit				
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	58	86	43	85
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)						
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Cyanide (total)						
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)						
Fluoride (Total)	100	mg/kg	< 100	< 100	< 100	< 100
pH (1:5 Aqueous extract at 25°C as rec.)						
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	8.9	9.1	8.7	8.6
% Moisture						
% Moisture	1	%	24	23	27	27
Heavy Metals						
Arsenic	2	mg/kg	33	18	33	31
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	160	140	170	120
Copper	5	mg/kg	77	55	79	64
Lead	5	mg/kg	< 5	< 5	< 5	< 5
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	250	150	240	230
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	150	87	140	120
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanoic acid (PFNA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTrDA) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	101	102	95	100
13C5-PFPeA (surr.)	1	%	101	96	89	101
13C5-PFHxA (surr.)	1	%	91	90	88	90

Client Sample ID			SX_OB_20220 406_13_48_SS _Primary_EUF	SX_OB_20220 406_13_50_SS _Primary_EUF	SX_OB_20220 406_13_54_SS _Triplicate_EU F	SX_OB_20220 406_13_55_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0012322	M22- Ap0012323	M22- Ap0012324	M22- Ap0012325
Date Sampled			Apr 06, 2022	Apr 06, 2022	Apr 06, 2022	Apr 06, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
13C4-PFHpA (surr.)	1	%	90	90	88	90
13C8-PFOA (surr.)	1	%	97	107	91	80
13C5-PFNA (surr.)	1	%	70	70	85	71
13C6-PFDA (surr.)	1	%	105	87	89	104
13C2-PFUnDA (surr.)	1	%	110	123	109	99
13C2-PFDoDA (surr.)	1	%	85	89	89	83
13C2-PFTeDA (surr.)	1	%	108	108	92	94
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	10	ug/kg	< 10	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	10	ug/kg	< 10	< 10	< 10	< 10
13C8-FOSA (surr.)	1	%	105	105	11	95
D3-N-MeFOSA (surr.)	1	%	93	95	91	97
D5-N-EtFOSA (surr.)	1	%	108	108	114	98
D7-N-MeFOSE (surr.)	1	%	91	93	95	81
D9-N-EtFOSE (surr.)	1	%	93	92	79	87
D5-N-EtFOSAA (surr.)	1	%	135	115	119	84
D3-N-MeFOSAA (surr.)	1	%	118	103	70	106
Perfluoroalkyl sulfonic acids (PFSA)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS) ^{N15}	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	81	86	77	84
18O2-PFHxS (surr.)	1	%	102	98	90	89
13C8-PFOS (surr.)	1	%	84	96	72	100
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	66	60	67	64
13C2-6:2 FTSA (surr.)	1	%	74	73	55	64

Client Sample ID			SX_OB_20220 406_13_48_SS _Primary_EUF	SX_OB_20220 406_13_50_SS _Primary_EUF	SX_OB_20220 406_13_54_SS _Triplicate_EU F	SX_OB_20220 406_13_55_SS _Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22- Ap0012322	M22- Ap0012323	M22- Ap0012324	M22- Ap0012325
Date Sampled			Apr 06, 2022	Apr 06, 2022	Apr 06, 2022	Apr 06, 2022
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
13C2-8:2 FTSA (surr.)	1	%	85	97	89	80
13C2-10:2 FTSA (surr.)	1	%	138	101	78	135
PFASs Summations						
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50	< 50	< 50

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
IWRG 621 WGTP Suite			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Melbourne	Apr 06, 2022	14 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Melbourne	Apr 06, 2022	14 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Melbourne	Apr 06, 2022	14 Days
Volatile Organics - Method: USEPA 8260 - MGT 350A Volatile Organics by GCMS	Melbourne	Apr 06, 2022	7 Days
Volatile Organics - Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices (USEPA 8260)	Melbourne	Apr 06, 2022	7 Days
Polycyclic Aromatic Hydrocarbons - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Melbourne	Apr 06, 2022	14 Days
Organochlorine Pesticides - Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)	Melbourne	Apr 06, 2022	14 Days
Polychlorinated Biphenyls - Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8082)	Melbourne	Apr 06, 2022	28 Days
Phenols (Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Melbourne	Apr 06, 2022	14 Days
Phenols (non-Halogenated) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Melbourne	Apr 06, 2022	14 Days
Chromium (hexavalent) - Method: LTM-INO-4100 Hexavalent Chromium by Spectrometric detection	Melbourne	Apr 06, 2022	28 Days
Cyanide (total) - Method: LTM-INO-4020 Total Free WAD Cyanide by CFA	Melbourne	Apr 07, 2022	14 Days
Fluoride (Total) - Method: LTM-INO-4150 Determination of Total Fluoride PART B – ISE - Method: LTM-INO-4150 Determination of Total Fluoride PART A – CIC	Melbourne	Apr 07, 2022	28 Days
pH (1:5 Aqueous extract at 25°C as rec.) - Method: LTM-GEN-7090 pH in soil by ISE	Melbourne	Apr 06, 2022	7 Days
Metals IWRG 621 : Metals M12 - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Melbourne	Apr 06, 2022	28 Days
% Moisture - Method: LTM-GEN-7080 Moisture	Melbourne	Apr 06, 2022	14 Days
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Apr 06, 2022	28 Days
Perfluoroalkyl sulfonamido substances - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Apr 06, 2022	28 Days
Perfluoroalkyl sulfonic acids (PFASs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Apr 06, 2022	28 Days
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Apr 06, 2022	28 Days
PFASs Summations - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Melbourne	Apr 06, 2022	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	Apr 6, 2022 5:29 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	877800	Due:	Apr 8, 2022
Project Name:	20220406152354-Eurofin-8	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID				
1	SX_OB_20220406_13_39_S_S_Primary_EU F	Apr 06, 2022	1:39PM	Soil	M22-Ap0012318		X	X	X
2	SX_OB_20220406_13_41_S_S_Duplicate_EU F	Apr 06, 2022	1:41PM	Soil	M22-Ap0012319		X	X	X
3	SX_OB_20220406_13_45_S_S_Primary_EU F	Apr 06, 2022	1:45PM	Soil	M22-Ap0012320		X	X	X

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	Apr 6, 2022 5:29 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	877800	Due:	Apr 8, 2022
Project Name:	20220406152354-Eurofin-8	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
4	SX_OB_20220406_13_46_S_S_Primary_EU_F	Apr 06, 2022	1:46PM	Soil	M22-Ap0012321		X	X	X
5	SX_OB_20220406_13_48_S_S_Primary_EU_F	Apr 06, 2022	1:48PM	Soil	M22-Ap0012322		X	X	X
6	SX_OB_20220406_13_50_S_S_Primary_EU_F	Apr 06, 2022	1:50PM	Soil	M22-Ap0012323		X	X	X
7	SX_OB_20220406_13_54_S	Apr 06, 2022	1:54PM	Soil	M22-Ap0012324		X	X	X

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063
Project Name: 20220406152354-Eurofin-8
Project ID: JC0927

Order No.:
Report #: 877800
Phone: 08 8338 1009
Fax:

Received: Apr 6, 2022 5:29 PM
Due: Apr 8, 2022
Priority: 2 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Triplicate_EUF								
8	SX_OB_20220406_13_55_S_S_Primary_EUF	Apr 06, 2022	1:55PM	Soil	M22-Ap0012325		X	X	X
9	SX_OB_20220406_13_58_S_R_Rinsate_EUF	Apr 06, 2022	1:58PM	Water	M22-Ap0012326			X	
10	SX_OB_20220406_14_02_S_B_Blank_EUF	Apr 06, 2022	2:02PM	Water	M22-Ap0012327			X	
11	SX_OB_20220	Apr 06, 2022	1:39PM	AUS Leachate	M22-	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	Apr 6, 2022 5:29 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	877800	Due:	Apr 8, 2022
Project Name:	20220406152354-Eurofin-8	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	406_13_39_S S_Primary_EU F			- pH 5.0	Ap0012328				
12	SX_OB_20220 406_13_41_S S_Duplicate_E UF	Apr 06, 2022	1:41PM	AUS Leachate - pH 5.0	M22- Ap0012329	X		X	
13	SX_OB_20220 406_13_45_S S_Primary_EU F	Apr 06, 2022	1:45PM	AUS Leachate - pH 5.0	M22- Ap0012330	X		X	
14	SX_OB_20220 406_13_46_S S_Primary_EU	Apr 06, 2022	1:46PM	AUS Leachate - pH 5.0	M22- Ap0012331	X		X	

Company Name: Agon Environmental Pty Ltd - VIC
Address: 3/224 Glen Osmond Road
Fullarton
SA 5063
Project Name: 20220406152354-Eurofin-8
Project ID: JC0927

Order No.:
Report #: 877800
Phone: 08 8338 1009
Fax:

Received: Apr 6, 2022 5:29 PM
Due: Apr 8, 2022
Priority: 2 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	F								
15	SX_OB_20220406_13_48_S_S_Primary_EU_F	Apr 06, 2022	1:48PM	AUS Leachate - pH 5.0	M22-Ap0012332	X		X	
16	SX_OB_20220406_13_50_S_S_Primary_EU_F	Apr 06, 2022	1:50PM	AUS Leachate - pH 5.0	M22-Ap0012333	X		X	
17	SX_OB_20220406_13_54_S_S_Triplicate_EUF	Apr 06, 2022	1:54PM	AUS Leachate - pH 5.0	M22-Ap0012334	X		X	
18	SX_OB_20220	Apr 06, 2022	1:55PM	AUS Leachate	M22-	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	Apr 6, 2022 5:29 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	877800	Due:	Apr 8, 2022
Project Name:	20220406152354-Eurofin-8	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	406_13_55_S S_Primary_EU F			- pH 5.0	Ap0012335				
19	SX_OB_20220 406_13_39_S S_Primary_EU F	Apr 06, 2022	1:39PM	AUS Leachate - Reagent Water	M22- Ap0012336	X		X	
20	SX_OB_20220 406_13_41_S S_Duplicate_E UF	Apr 06, 2022	1:41PM	AUS Leachate - Reagent Water	M22- Ap0012337	X		X	
21	SX_OB_20220 406_13_45_S S_Primary_EU	Apr 06, 2022	1:45PM	AUS Leachate - Reagent Water	M22- Ap0012338	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	Apr 6, 2022 5:29 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	877800	Due:	Apr 8, 2022
Project Name:	20220406152354-Eurofin-8	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	F								
22	SX_OB_20220406_13_46_S_S_Primary_EU_F	Apr 06, 2022	1:46PM	AUS Leachate - Reagent Water	M22-Ap0012339	X		X	
23	SX_OB_20220406_13_48_S_S_Primary_EU_F	Apr 06, 2022	1:48PM	AUS Leachate - Reagent Water	M22-Ap0012340	X		X	
24	SX_OB_20220406_13_50_S_S_Primary_EU_F	Apr 06, 2022	1:50PM	AUS Leachate - Reagent Water	M22-Ap0012341	X		X	
25	SX_OB_20220	Apr 06, 2022	1:54PM	AUS Leachate	M22-	X		X	

Company Name:	Agon Environmental Pty Ltd - VIC	Order No.:		Received:	Apr 6, 2022 5:29 PM
Address:	3/224 Glen Osmond Road Fullarton SA 5063	Report #:	877800	Due:	Apr 8, 2022
Project Name:	20220406152354-Eurofin-8	Phone:	08 8338 1009	Priority:	2 Day
Project ID:	JC0927	Fax:		Contact Name:	Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WQTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	406_13_54_S S_Triplicate_E UF			- Reagent Water	Ap0012342				
26	SX_OB_20220 406_13_55_S S_Primary_EU F	Apr 06, 2022	1:55PM	AUS Leachate - Reagent Water	M22- Ap0012343	X		X	
Test Counts						16	8	26	8

Internal Quality Control Review and Glossary

General

- Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
- All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
- SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- Samples were analysed on an 'as received' basis.
- Information identified on this report with blue colour, indicates data provided by customer that may have an impact on the results.
- This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	mg/L: milligrams per litre	µg/L: micrograms per litre
ppm: parts per million	ppb: parts per billion	%: Percentage
org/100 mL: Organisms per 100 millilitres	NTU: Nephelometric Turbidity Units	MPN/100 mL: Most Probable Number of organisms per 100 millilitres

Terms

APHA	American Public Health Association
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
TBTO	Tributyltin oxide (<i>bis</i> -tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment however free tributyltin was measured and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 5.4
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site specific Sampling Analysis and Quality Plan (SAQP) have been implemented

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR: No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.4 where no positive PFAS results have been reported have been reviewed and no data was affected.

QC Data General Comments

- Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
- Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery the term "INT" appears against that analyte.
- For Matrix Spikes and LCS results a dash "-" in the report means that the specific analyte was not added to the QC sample.
- Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Volatile Organics							
Hexachlorobutadiene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Benzene	mg/kg	< 0.1			0.1	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
trans-1,2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1,3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g,h,i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a,h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4,4'-DDD	mg/kg	< 0.05			0.05	Pass	
4,4'-DDE	mg/kg	< 0.05			0.05	Pass	
4,4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-HCH	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-HCH	mg/kg	< 0.05			0.05	Pass	
d-HCH	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-HCH (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.05			0.05	Pass	
Toxaphene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.1			0.1	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.1			0.1	Pass	
Aroclor-1242	mg/kg	< 0.1			0.1	Pass	
Aroclor-1248	mg/kg	< 0.1			0.1	Pass	
Aroclor-1254	mg/kg	< 0.1			0.1	Pass	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB*	mg/kg	< 0.1			0.1	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2,4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2,4,5-Trichlorophenol	mg/kg	< 1			1	Pass	
2,4,6-Trichlorophenol	mg/kg	< 1			1	Pass	
2,6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4,6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4,6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Nitrophenol	mg/kg	< 1			1.0	Pass	
2,4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2,4-Dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Chromium (hexavalent)	mg/kg	< 1			1	Pass	
Cyanide (total)	mg/kg	< 5			5	Pass	
Fluoride (Total)	mg/kg	< 100			100	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Molybdenum	mg/kg	< 5			5	Pass	
Nickel	mg/kg	< 5			5	Pass	
Selenium	mg/kg	< 2			2	Pass	
Silver	mg/kg	< 2			2	Pass	
Tin	mg/kg	< 10			10	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/kg	< 5			5	Pass	
Perfluoropentanoic acid (PFPeA)	ug/kg	< 5			5	Pass	
Perfluorohexanoic acid (PFHxA)	ug/kg	< 5			5	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/kg	< 5			5	Pass	
Perfluorooctanoic acid (PFOA)	ug/kg	< 5			5	Pass	
Perfluorononanoic acid (PFNA)	ug/kg	< 5			5	Pass	
Perfluorodecanoic acid (PFDA)	ug/kg	< 5			5	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/kg	< 5			5	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/kg	< 5			5	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/kg	< 5			5	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/kg	< 5			5	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/kg	< 5			5	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/kg	< 5			5	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/kg	< 5			5	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/kg	< 5			5	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/kg	< 10			10	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/kg	< 10			10	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/kg	< 5			5	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/kg	< 5			5	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/kg	< 5			5	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/kg	< 5			5	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	< 5			5	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	< 5			5	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/kg	< 5			5	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/kg	< 5			5	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/kg	< 10			10	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	83			70-130	Pass	
TRH C10-C14	%	120			70-130	Pass	
Naphthalene	%	77			70-130	Pass	
TRH C6-C10	%	82			70-130	Pass	
TRH >C10-C16	%	124			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	81			70-130	Pass	
1.1.1-Trichloroethane	%	79			70-130	Pass	
1.2-Dichlorobenzene	%	84			70-130	Pass	
1.2-Dichloroethane	%	115			70-130	Pass	
Benzene	%	103			70-130	Pass	
Ethylbenzene	%	82			70-130	Pass	

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
m&p-Xylenes	%	80		70-130	Pass	
Toluene	%	92		70-130	Pass	
Trichloroethene	%	108		70-130	Pass	
Xylenes - Total*	%	81		70-130	Pass	
LCS - % Recovery						
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	%	83		70-130	Pass	
Acenaphthylene	%	104		70-130	Pass	
Anthracene	%	102		70-130	Pass	
Benz(a)anthracene	%	89		70-130	Pass	
Benzo(a)pyrene	%	96		70-130	Pass	
Benzo(b&i)fluoranthene	%	91		70-130	Pass	
Benzo(g,h,i)perylene	%	83		70-130	Pass	
Benzo(k)fluoranthene	%	89		70-130	Pass	
Chrysene	%	87		70-130	Pass	
Dibenz(a,h)anthracene	%	99		70-130	Pass	
Fluoranthene	%	112		70-130	Pass	
Fluorene	%	104		70-130	Pass	
Indeno(1,2,3-cd)pyrene	%	100		70-130	Pass	
Naphthalene	%	89		70-130	Pass	
Phenanthrene	%	94		70-130	Pass	
Pyrene	%	111		70-130	Pass	
LCS - % Recovery						
Organochlorine Pesticides						
Chlordanes - Total	%	85		70-130	Pass	
4,4'-DDD	%	86		70-130	Pass	
4,4'-DDE	%	121		70-130	Pass	
4,4'-DDT	%	81		70-130	Pass	
a-HCH	%	74		70-130	Pass	
Aldrin	%	93		70-130	Pass	
b-HCH	%	78		70-130	Pass	
d-HCH	%	124		70-130	Pass	
Dieldrin	%	106		70-130	Pass	
Endosulfan I	%	112		70-130	Pass	
Endosulfan II	%	76		70-130	Pass	
Endosulfan sulphate	%	78		70-130	Pass	
Endrin	%	89		70-130	Pass	
Endrin aldehyde	%	92		70-130	Pass	
Endrin ketone	%	106		70-130	Pass	
g-HCH (Lindane)	%	101		70-130	Pass	
Heptachlor	%	104		70-130	Pass	
Heptachlor epoxide	%	106		70-130	Pass	
Hexachlorobenzene	%	75		70-130	Pass	
Methoxychlor	%	90		70-130	Pass	
LCS - % Recovery						
Polychlorinated Biphenyls						
Aroclor-1260	%	78		70-130	Pass	
LCS - % Recovery						
Phenols (Halogenated)						
2-Chlorophenol	%	84		25-140	Pass	
2,4-Dichlorophenol	%	72		25-140	Pass	
2,4,5-Trichlorophenol	%	69		25-140	Pass	
2,4,6-Trichlorophenol	%	80		25-140	Pass	
2,6-Dichlorophenol	%	80		25-140	Pass	

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
4-Chloro-3-methylphenol	%	71		25-140	Pass	
Pentachlorophenol	%	89		25-140	Pass	
Tetrachlorophenols - Total	%	49		25-140	Pass	
LCS - % Recovery						
Phenols (non-Halogenated)						
2-Cyclohexyl-4,6-dinitrophenol	%	56		25-140	Pass	
2-Methyl-4,6-dinitrophenol	%	62		25-140	Pass	
2-Nitrophenol	%	81		25-140	Pass	
2,4-Dimethylphenol	%	72		25-140	Pass	
2,4-Dinitrophenol	%	49		25-140	Pass	
2-Methylphenol (o-Cresol)	%	68		25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	77		25-140	Pass	
4-Nitrophenol	%	78		25-140	Pass	
Dinoseb	%	75		25-140	Pass	
Phenol	%	67		25-140	Pass	
LCS - % Recovery						
Chromium (hexavalent)	%	86		70-130	Pass	
Cyanide (total)	%	99		70-130	Pass	
Fluoride (Total)	%	111		70-130	Pass	
LCS - % Recovery						
Heavy Metals						
Arsenic	%	113		80-120	Pass	
Cadmium	%	106		80-120	Pass	
Chromium	%	119		80-120	Pass	
Copper	%	117		80-120	Pass	
Lead	%	116		80-120	Pass	
Mercury	%	111		80-120	Pass	
Molybdenum	%	113		80-120	Pass	
Nickel	%	111		80-120	Pass	
Selenium	%	109		80-120	Pass	
Silver	%	115		80-120	Pass	
Tin	%	110		80-120	Pass	
Zinc	%	113		80-120	Pass	
LCS - % Recovery						
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)	%	76		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	122		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	80		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	72		50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	89		50-150	Pass	
Perfluorononanoic acid (PFNA)	%	73		50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	66		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	63		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	66		50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	106		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	110		50-150	Pass	
LCS - % Recovery						
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)	%	88		50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	81		50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	104		50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	75		50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	104		50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	138		50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	83			50-150	Pass		
LCS - % Recovery								
Perfluoroalkyl sulfonic acids (PFASs)								
Perfluorobutanesulfonic acid (PFBS)	%	94			50-150	Pass		
Perfluorononanesulfonic acid (PFNS)	%	124			50-150	Pass		
Perfluoropropanesulfonic acid (PFPrS)	%	122			50-150	Pass		
Perfluoropentanesulfonic acid (PFPeS)	%	94			50-150	Pass		
Perfluorohexanesulfonic acid (PFHxS)	%	86			50-150	Pass		
Perfluoroheptanesulfonic acid (PFHpS)	%	91			50-150	Pass		
Perfluorooctanesulfonic acid (PFOS)	%	99			50-150	Pass		
Perfluorodecanesulfonic acid (PFDS)	%	107			50-150	Pass		
LCS - % Recovery								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)								
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	120			50-150	Pass		
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	81			50-150	Pass		
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	123			50-150	Pass		
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	119			50-150	Pass		
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery								
Total Recoverable Hydrocarbons				Result 1				
TRH C6-C9	M22-Ap0005803	NCP	%	100		70-130	Pass	
TRH C10-C14	M22-Ap0012211	NCP	%	109		70-130	Pass	
Naphthalene	M22-Ap0005803	NCP	%	95		70-130	Pass	
TRH C6-C10	M22-Ap0005803	NCP	%	100		70-130	Pass	
TRH >C10-C16	M22-Ap0012211	NCP	%	115		70-130	Pass	
Spike - % Recovery								
Volatile Organics				Result 1				
1.1-Dichloroethene	M22-Ap0005817	NCP	%	82		70-130	Pass	
1.1.1-Trichloroethane	M22-Ap0005803	NCP	%	86		70-130	Pass	
1.2-Dichlorobenzene	M22-Ap0005803	NCP	%	115		70-130	Pass	
1.2-Dichloroethane	M22-Ap0005803	NCP	%	122		70-130	Pass	
Benzene	M22-Ap0005803	NCP	%	108		70-130	Pass	
Ethylbenzene	M22-Ap0005803	NCP	%	119		70-130	Pass	
m&p-Xylenes	M22-Ap0005803	NCP	%	116		70-130	Pass	
o-Xylene	M22-Ap0005803	NCP	%	118		70-130	Pass	
Toluene	M22-Ap0005803	NCP	%	114		70-130	Pass	
Trichloroethene	M22-Ap0005803	NCP	%	129		70-130	Pass	
Xylenes - Total*	M22-Ap0005803	NCP	%	117		70-130	Pass	
Spike - % Recovery								
Polycyclic Aromatic Hydrocarbons				Result 1				
Acenaphthene	M22-Ap0005190	NCP	%	88		70-130	Pass	
Acenaphthylene	M22-Ap0005190	NCP	%	81		70-130	Pass	
Benzo(b&j)fluoranthene	M22-Ap0005190	NCP	%	112		70-130	Pass	
Benzo(g,h,i)perylene	M22-Ap0005190	NCP	%	91		70-130	Pass	
Benzo(k)fluoranthene	M22-Ap0005190	NCP	%	99		70-130	Pass	
Dibenz(a,h)anthracene	M22-Ap0005190	NCP	%	85		70-130	Pass	
Fluorene	M22-Ap0005190	NCP	%	121		70-130	Pass	
Indeno(1.2.3-cd)pyrene	M22-Ap0005190	NCP	%	102		70-130	Pass	
Spike - % Recovery								
Organochlorine Pesticides				Result 1				
Chlordanes - Total	M22-Ap0005702	NCP	%	89		70-130	Pass	
4.4'-DDD	M22-Ap0005702	NCP	%	81		70-130	Pass	
4.4'-DDE	M22-Ap0005702	NCP	%	98		70-130	Pass	
4.4'-DDT	M22-Ap0005702	NCP	%	123		70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
a-HCH	M22-Ap0005702	NCP	%	81		70-130	Pass	
Aldrin	M22-Ap0005702	NCP	%	84		70-130	Pass	
b-HCH	M22-Ap0005702	NCP	%	78		70-130	Pass	
d-HCH	M22-Ap0005702	NCP	%	88		70-130	Pass	
Dieldrin	M22-Ap0005702	NCP	%	94		70-130	Pass	
Endosulfan I	M22-Ap0005702	NCP	%	98		70-130	Pass	
Endosulfan II	M22-Ap0005702	NCP	%	79		70-130	Pass	
Endosulfan sulphate	M22-Ap0005702	NCP	%	92		70-130	Pass	
Endrin	M22-Ap0005702	NCP	%	106		70-130	Pass	
Endrin aldehyde	M22-Ap0005702	NCP	%	123		70-130	Pass	
Endrin ketone	M22-Ap0005702	NCP	%	100		70-130	Pass	
g-HCH (Lindane)	M22-Ap0005702	NCP	%	75		70-130	Pass	
Heptachlor	M22-Ap0005702	NCP	%	83		70-130	Pass	
Heptachlor epoxide	M22-Ap0005702	NCP	%	81		70-130	Pass	
Hexachlorobenzene	M22-Ap0005702	NCP	%	94		70-130	Pass	
Methoxychlor	M22-Ap0005702	NCP	%	74		70-130	Pass	
Spike - % Recovery								
Polychlorinated Biphenyls				Result 1				
Aroclor-1016	M22-Ap0005702	NCP	%	123		70-130	Pass	
Aroclor-1260	M22-Ap0005702	NCP	%	90		70-130	Pass	
Spike - % Recovery								
Phenols (Halogenated)				Result 1				
2-Chlorophenol	M22-Ap0005190	NCP	%	63		30-130	Pass	
2,4-Dichlorophenol	M22-Ap0005190	NCP	%	57		30-130	Pass	
2,4,5-Trichlorophenol	M22-Ap0005190	NCP	%	59		30-130	Pass	
2,4,6-Trichlorophenol	M22-Ap0005190	NCP	%	68		30-130	Pass	
2,6-Dichlorophenol	M22-Ap0005190	NCP	%	63		30-130	Pass	
4-Chloro-3-methylphenol	M22-Ap0005190	NCP	%	59		30-130	Pass	
Pentachlorophenol	M22-Ap0005190	NCP	%	77		30-130	Pass	
Tetrachlorophenols - Total	M22-Ap0005190	NCP	%	38		30-130	Pass	
Spike - % Recovery								
Phenols (non-Halogenated)				Result 1				
2-Cyclohexyl-4,6-dinitrophenol	M22-Ap0005190	NCP	%	73		30-130	Pass	
2-Methyl-4,6-dinitrophenol	M22-Ap0005190	NCP	%	61		30-130	Pass	
2-Nitrophenol	M22-Ap0005190	NCP	%	63		30-130	Pass	
2,4-Dimethylphenol	M22-Ap0005190	NCP	%	82		30-130	Pass	
2,4-Dinitrophenol	M22-Ap0005190	NCP	%	55		30-130	Pass	
2-Methylphenol (o-Cresol)	M22-Ap0005190	NCP	%	66		30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Ap0005190	NCP	%	74		30-130	Pass	
4-Nitrophenol	M22-Ap0005190	NCP	%	63		30-130	Pass	
Dinoseb	M22-Ap0005190	NCP	%	72		30-130	Pass	
Phenol	M22-Ap0005190	NCP	%	66		30-130	Pass	
Spike - % Recovery								
Heavy Metals				Result 1				
Arsenic	M22-Ap0004296	NCP	%	119		75-125	Pass	
Cadmium	M22-Ap0004296	NCP	%	93		75-125	Pass	
Chromium	M22-Ap0004296	NCP	%	123		75-125	Pass	
Copper	M22-Ap0004225	NCP	%	117		75-125	Pass	
Lead	M22-Ap0004225	NCP	%	105		75-125	Pass	
Mercury	M22-Ap0004296	NCP	%	117		75-125	Pass	
Molybdenum	M22-Ap0004296	NCP	%	115		75-125	Pass	
Nickel	M22-Ap0004296	NCP	%	111		75-125	Pass	
Selenium	M22-Ap0004296	NCP	%	109		75-125	Pass	
Silver	M22-Ap0004296	NCP	%	95		75-125	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Tin	M22-Ap0004296	NCP	%	114		75-125	Pass	
Zinc	M22-Ap0004225	NCP	%	115		75-125	Pass	
Spike - % Recovery								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1				
Perfluorobutanoic acid (PFBA)	M22-Ap0005874	NCP	%	84		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ap0005874	NCP	%	136		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ap0005874	NCP	%	90		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ap0005874	NCP	%	77		50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ap0005874	NCP	%	95		50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-Ap0005874	NCP	%	82		50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ap0005874	NCP	%	72		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ap0005874	NCP	%	60		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ap0005874	NCP	%	83		50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ap0005874	NCP	%	128		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ap0005874	NCP	%	126		50-150	Pass	
Spike - % Recovery								
Perfluoroalkyl sulfonamido substances				Result 1				
Perfluorooctane sulfonamide (FOSA)	M22-Ap0005874	NCP	%	97		50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ap0005874	NCP	%	98		50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ap0005874	NCP	%	102		50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ap0005874	NCP	%	89		50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ap0005874	NCP	%	121		50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ap0005874	NCP	%	106		50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ap0005874	NCP	%	87		50-150	Pass	
Spike - % Recovery								
Perfluoroalkyl sulfonic acids (PFSA)				Result 1				
Perfluorobutanesulfonic acid (PFBS)	M22-Ap0005874	NCP	%	99		50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ap0005874	NCP	%	146		50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ap0005874	NCP	%	132		50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ap0005874	NCP	%	88		50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ap0005874	NCP	%	80		50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ap0005874	NCP	%	87		50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ap0005874	NCP	%	103		50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ap0005874	NCP	%	115		50-150	Pass	
Spike - % Recovery								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ap0005874	NCP	%	101		50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ap0005874	NCP	%	98			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ap0005874	NCP	%	108			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ap0005874	NCP	%	139			50-150	Pass	
Spike - % Recovery									
				Result 1					
Chromium (hexavalent)	M22-Ap0012320	CP	%	111			70-130	Pass	
Spike - % Recovery									
				Result 1					
Fluoride (Total)	M22-Ap0012321	CP	%	86			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	M22-Ap0007207	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	M22-Ap0005809	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M22-Ap0005809	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	M22-Ap0005809	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Naphthalene	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	M22-Ap0007207	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	M22-Ap0005809	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M22-Ap0005809	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	M22-Ap0005809	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Hexachlorobutadiene	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trichlorobenzene	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzene	M22-Ap0007207	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Bromobenzene	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
Bromochloromethane	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromodichloromethane	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromoform	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Bromomethane	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Carbon disulfide	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Carbon Tetrachloride	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chlorobenzene	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloroethane	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloroform	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chloromethane	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
cis-1.2-Dichloroethene	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
cis-1.3-Dichloropropene	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibromochloromethane	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibromomethane	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dichlorodifluoromethane	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Ethylbenzene	M22-Ap0007207	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Iodomethane	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Isopropyl benzene (Cumene)	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
m&p-Xylenes	M22-Ap0007207	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Methylene Chloride	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
o-Xylene	M22-Ap0007207	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Styrene	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Tetrachloroethene	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Toluene	M22-Ap0007207	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
trans-1.2-Dichloroethene	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
trans-1.3-Dichloropropene	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Trichloroethene	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Trichlorofluoromethane	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Vinyl chloride	M22-Ap0007207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Xylenes - Total*	M22-Ap0007207	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Cyanide (total)	M22-Ap0010607	NCP	mg/kg	< 5	< 5	<1	30%	Pass
Fluoride (Total)	M22-Ap0005545	NCP	mg/kg	390	390	2.0	30%	Pass
pH (1:5 Aqueous extract at 25°C as rec.)	M22-Ap0009416	NCP	pH Units	8.9	8.9	pass	30%	Pass
% Moisture	M22-Ap0012318	CP	%	27	25	8.0	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	M22-Ap0004296	NCP	mg/kg	32	33	2.0	30%	Pass
Cadmium	M22-Ap0004296	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Chromium	M22-Ap0004296	NCP	mg/kg	8.5	8.8	3.0	30%	Pass
Copper	M22-Ap0004296	NCP	mg/kg	62	63	3.0	30%	Pass
Lead	M22-Ap0004296	NCP	mg/kg	100	110	2.0	30%	Pass
Mercury	M22-Ap0004296	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Molybdenum	M22-Ap0004296	NCP	mg/kg	< 5	< 5	<1	30%	Pass
Nickel	M22-Ap0004296	NCP	mg/kg	< 5	< 5	<1	30%	Pass
Selenium	M22-Ap0004296	NCP	mg/kg	< 2	< 2	<1	30%	Pass
Silver	M22-Ap0004296	NCP	mg/kg	< 2	< 2	<1	30%	Pass
Tin	M22-Ap0004296	NCP	mg/kg	< 10	< 10	<1	30%	Pass
Zinc	M22-Ap0004296	NCP	mg/kg	28	28	2.0	30%	Pass

Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanoic acid (PFNA)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ap0005529	NCP	ug/kg	< 10	< 10	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ap0005529	NCP	ug/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ap0005529	NCP	ug/kg	< 10	< 10	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ap0005529	NCP	ug/kg	< 5	< 5	<1	30%	Pass

Duplicate								
				Result 1	Result 2	RPD		
Chromium (hexavalent)	M22-Ap0012322	CP	mg/kg	< 1	< 1	<1	30%	Pass
Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Acenaphthene	M22-Ap0012325	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Acenaphthylene	M22-Ap0012325	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Anthracene	M22-Ap0012325	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benz(a)anthracene	M22-Ap0012325	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(a)pyrene	M22-Ap0012325	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(b&j)fluoranthene	M22-Ap0012325	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(g,h,i)perylene	M22-Ap0012325	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(k)fluoranthene	M22-Ap0012325	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chrysene	M22-Ap0012325	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibenz(a,h)anthracene	M22-Ap0012325	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluoranthene	M22-Ap0012325	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluorene	M22-Ap0012325	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Indeno(1,2,3-cd)pyrene	M22-Ap0012325	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Naphthalene	M22-Ap0012325	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	M22-Ap0012325	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	M22-Ap0012325	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Chlordanes - Total	M22-Ap0012325	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
4,4'-DDD	M22-Ap0012325	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDE	M22-Ap0012325	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDT	M22-Ap0012325	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
a-HCH	M22-Ap0012325	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Aldrin	M22-Ap0012325	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
b-HCH	M22-Ap0012325	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
d-HCH	M22-Ap0012325	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dieldrin	M22-Ap0012325	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan I	M22-Ap0012325	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan II	M22-Ap0012325	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan sulphate	M22-Ap0012325	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin	M22-Ap0012325	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin aldehyde	M22-Ap0012325	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin ketone	M22-Ap0012325	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
g-HCH (Lindane)	M22-Ap0012325	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor	M22-Ap0012325	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor epoxide	M22-Ap0012325	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Hexachlorobenzene	M22-Ap0012325	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Methoxychlor	M22-Ap0012325	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Toxaphene	M22-Ap0012325	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Polychlorinated Biphenyls				Result 1	Result 2	RPD		
Aroclor-1016	M22-Ap0012325	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1221	M22-Ap0012325	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1232	M22-Ap0012325	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1242	M22-Ap0012325	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1248	M22-Ap0012325	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1254	M22-Ap0012325	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1260	M22-Ap0012325	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Total PCB*	M22-Ap0012325	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass

Duplicate								
Phenols (Halogenated)				Result 1	Result 2	RPD		
2-Chlorophenol	M22-Ap0012325	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4-Dichlorophenol	M22-Ap0012325	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4,5-Trichlorophenol	M22-Ap0012325	CP	mg/kg	< 1	< 1	<1	30%	Pass
2,4,6-Trichlorophenol	M22-Ap0012325	CP	mg/kg	< 1	< 1	<1	30%	Pass
2,6-Dichlorophenol	M22-Ap0012325	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
4-Chloro-3-methylphenol	M22-Ap0012325	CP	mg/kg	< 1	< 1	<1	30%	Pass
Pentachlorophenol	M22-Ap0012325	CP	mg/kg	< 1	< 1	<1	30%	Pass
Tetrachlorophenols - Total	M22-Ap0012325	CP	mg/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Phenols (non-Halogenated)				Result 1	Result 2	RPD		
2-Cyclohexyl-4,6-dinitrophenol	M22-Ap0012325	CP	mg/kg	< 20	< 20	<1	30%	Pass
2-Methyl-4,6-dinitrophenol	M22-Ap0012325	CP	mg/kg	< 5	< 5	<1	30%	Pass
2-Nitrophenol	M22-Ap0012325	CP	mg/kg	< 1	< 1	<1	30%	Pass
2,4-Dimethylphenol	M22-Ap0012325	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4-Dinitrophenol	M22-Ap0012325	CP	mg/kg	< 5	< 5	<1	30%	Pass
2-Methylphenol (o-Cresol)	M22-Ap0012325	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
3&4-Methylphenol (m&p-Cresol)	M22-Ap0012325	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
4-Nitrophenol	M22-Ap0012325	CP	mg/kg	< 5	< 5	<1	30%	Pass
Dinoseb	M22-Ap0012325	CP	mg/kg	< 20	< 20	<1	30%	Pass
Phenol	M22-Ap0012325	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Chromium (hexavalent)	M22-Ap0012325	CP	mg/kg	< 1	< 1	<1	30%	Pass

Comments
Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	No
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).

Authorised by:

Michael Cassidy	Analytical Services Manager
Joseph Edouard	Senior Analyst (VIC)
Mary Makarios	Senior Analyst (NSW)
Linda Chouman	Senior Analyst (NSW)
Scott Beddoes	Senior Analyst (NSW)
Edward Lee	Senior Analyst (VIC)
Glenn Jackson	Senior Analyst (NSW)



Glenn Jackson
General Manager


Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

CHAIN OF CUSTODY DOCUMENTATION								 Australian Laboratory Services Pty Ltd										
CLIENT: Agon Environmental				SAMPLER: HK - EP Risk														
ADDRESS / OFFICE: Melbourne				MOBILE 1: +61 400 826 907 (Craig Trimbur)														
PROJECT MANAGER (PM): Craig Trimbur				MOBILE 2: +61 490 411 004 (David Lawson)														
PROJECT ID: JC0927				EMAIL REPORT TO: Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au														
SITE: 20220323044928-ALS-12				P.O. NO.:				motherhublabresults1@wgtp.com.au Amrit.Kaur@agile-analytics.com.au										
RESULTS REQUIRED (Date): 5 days				QUOTE NO.: ME-150-19 WGTP				EMAIL INVOICE TO: (if different to report) Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au										
ANALYSIS REQUIRED including SUITES (note - suite codes must be listed to attract suite prices)																		
COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL: SAMPLE INFORMATION (note: S = Soil, W=Water) CONTAINER INFORMATION																		Notes:
ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles	Spot Sample Prep	P-16 plus Cr	PFAS 28 Extended suite	ASLP PFAS - Extended Suite (Lab to determine pH)	DI Leachate PFAS - Extended Suite							
11	1	SX_OB_20220322_07_57_SS_Primary_ALS	S	22/03/2022	7:57	Bucket	1	x	x	x	x	x						
12	2	SX_OB_20220322_07_58_SS_Duplicate_ALS	S	22/03/2022	7:58	Bucket	1	x	x	x	x	x						
13	3	SX_OB_20220322_08_17_SR_Rinsate_ALS	W	22/03/2022	8:17	Bottle	1			x								
14	4	SX_OB_20220322_08_19_SB_Blank_ALS	W	22/03/2022	8:19	Bottle	1			x								
15	5	SX_OB_20220322_11_53_SS_Primary_ALS	S	22/03/2022	11:53	Bucket	1	x	x	x	x	x						
16	6	SX_OB_20220322_15_56_SS_Triplicate_ALS	S	22/03/2022	15:56	Bucket	1	x	x	x	x	x						
17	7	SX_OB_20220322_16_02_SS_Primary_ALS	S	22/03/2022	16:02	Bucket	1	x	x	x	x	x						
18	8	SX_OB_20220322_20_15_SS_Primary_ALS	S	22/03/2022	20:15	Bucket	1	x	x	x	x	x						
19	9	SX_OB_20220323_00_05_SS_Primary_ALS	S	23/03/2022	00:05	Bucket	1	x	x	x	x	x						
20	10	SX_OB_20220323_04_04_SS_Primary_ALS	S	23/03/2022	04:04	Bucket	1	x	x	x	x	x						
RELINQUISHED BY:							RECEIVED BY:							METHOD OF SHIPMENT				
Name: Emma Strong			Date: 23/03/22				Name: Maura			Date: 23/3				Con' Note No:				
Of: EP Risk			Time: 11:15am				Of: M			Time: 12:28								
Name:			Date:				Name:			Date:				Transport Co:				
Of:			Time:				Of:			Time:								
Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; V = VOA Vial HCl Preserved; VS = VOA Vial Sulphuric Preserved; SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bad for Acid Sulphate Soils; B = Unpreserved Bag.																		

Environmental Division
Melbourne
Work Order Reference
EM2205138



Telephone : + 61-3-8549 9600

CERTIFICATE OF ANALYSIS

Work Order : **EM2205138**
Client : **AGON ENVIRONMENTAL PTY LTD**
Contact : DAVID LAWSON
Address : D1.1 63-85 TURNER STREET
 PORT MELBOURNE 3207

Telephone : ----
Project : JC0927
Order number : ----
C-O-C number : 20220323044928-ALS-12
Sampler : HK - EP Risk
Site : 20220323044928-ALS-12
Quote number : EN/150/19 -WGTP -Bulk Sample Quote
No. of samples received : 18
No. of samples analysed : 18

Page : 1 of 29
Laboratory : Environmental Division Melbourne
Contact : Bronwyn Sheen
Address : 4 Westall Rd Springvale VIC Australia 3171

Telephone : +6138549 9600
Date Samples Received : 23-Mar-2022 12:20
Date Analysis Commenced : 24-Mar-2022
Issue Date : 30-Mar-2022 21:35



Accreditation No. 825
 Accredited for compliance with
 ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Jarwis Nheu	Senior Inorganic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Organics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC



General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a,h)anthracene (1.0), Benzo(g,h,i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP231X - Per- and Polyfluoroalkyl Substances (PFAS): Samples received in 20ml or 125ml bottles have been tested in accordance with the QSM5.3 compliant, NATA accredited method. 60mL or 250mL bottles have been tested to the legacy QSM 5.1 aligned, NATA accredited method.
- EP074-UT: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074-WF: Where reported, Sum of trichlorobenzenes is the sum of the reported concentrations of 1,2,3-Trichlorobenzene and 1,2,4-Trichlorobenzene, and 1,3,5-Trichlorobenzene at or above the LOR.
- EP231X: Poor matrix spike recovery for sample EM2204780-010 due to sample matrix interference. Confirmed by re-analysis.
- EP075-EM: EM2205040_004 Poor matrix spike recovery due to sample matrix.
- EP231: Stable isotope enriched internal standards are added to samples prior to extraction. Target compounds have a direct analogous internal standard with the exception of PFPeS, PFHpA, PFDS, PFTTrDA and 10:2 FTS. These compounds use an internal standard that is chemically related and has a retention time close to that of the target compound. The DQO for internal standard response is 50-150% of that established at initial calibration. PFOS is quantified using a certified, traceable standard consisting of linear and branched PFOS isomers. These practices are in line with recommendations in the National Environmental Management Plan for PFAS (Australian HEPA) and also conform to QSM 5.3 (US DoD) requirements.
- EN60: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.
- EN60-DI: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.



Analytical Results

Sub-Matrix: ASLP LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220322_07_57_SS_Primary_ALS	SX_OB_20220322_07_58_SS_Duplicate_ALS	SX_OB_20220322_11_53_SS_Primary_ALS	SX_OB_20220322_15_56_SS_Triplicate_ALS	SX_OB_20220322_16_02_SS_Primary_ALS
Sampling date / time				22-Mar-2022 07:57	22-Mar-2022 07:58	22-Mar-2022 11:53	22-Mar-2022 15:56	22-Mar-2022 16:02
Compound	CAS Number	LOR	Unit	EM2205138-001	EM2205138-002	EM2205138-005	EM2205138-006	EM2205138-007
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05



Analytical Results

Sub-Matrix: ASLP LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220322_07_57_SS_Primary_ALS	SX_OB_20220322_07_58_SS_Duplicate_ALS	SX_OB_20220322_11_53_SS_Primary_ALS	SX_OB_20220322_15_56_SS_Triplicate_ALS	SX_OB_20220322_16_02_SS_Primary_ALS
Sampling date / time				22-Mar-2022 07:57	22-Mar-2022 07:58	22-Mar-2022 11:53	22-Mar-2022 15:56	22-Mar-2022 16:02
Compound	CAS Number	LOR	Unit	EM2205138-001	EM2205138-002	EM2205138-005	EM2205138-006	EM2205138-007
				Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231P: PFAS Sums								
Sum of PFAS	----	0.10	µg/L	<0.10	<0.10	<0.10	<0.10	<0.10
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFAS (WA DER List)	----	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	96.7	98.9	98.8	99.3	99.1
13C8-PFOA	----	0.02	%	104	105	107	103	103



Analytical Results

Sub-Matrix: ASLP LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220322_20_15_SS_Primary_ALS	SX_OB_20220323_00_05_SS_Primary_ALS	SX_OB_20220323_04_04_SS_Primary_ALS	----	----
Sampling date / time				22-Mar-2022 20:15	22-Mar-2022 00:05	22-Mar-2022 04:04	----	----
Compound	CAS Number	LOR	Unit	EM2205138-008	EM2205138-009	EM2205138-010	-----	-----
				Result	Result	Result	----	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	<0.02	----	----
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	<0.1	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	<0.05	----	----
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	----	----



Analytical Results

Sub-Matrix: ASLP LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220322_20_15_SS_Primary_ALS	SX_OB_20220323_00_05_SS_Primary_ALS	SX_OB_20220323_04_04_SS_Primary_ALS	----	----
Sampling date / time				22-Mar-2022 20:15	22-Mar-2022 00:05	22-Mar-2022 04:04	----	----
Compound	CAS Number	LOR	Unit	EM2205138-008	EM2205138-009	EM2205138-010	-----	-----
				Result	Result	Result	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	<0.05	<0.05	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	<0.05	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	<0.05	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	<0.05	----	----
EP231P: PFAS Sums								
Sum of PFAS	----	0.10	µg/L	<0.10	<0.10	<0.10	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	----	----
Sum of PFAS (WA DER List)	----	0.05	µg/L	<0.05	<0.05	<0.05	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	96.1	91.8	89.9	----	----
13C8-PFOA	----	0.02	%	101	106	107	----	----



Analytical Results

Sub-Matrix: DI WATER LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220322_07_57_SS_Primary_ALS	SX_OB_20220322_07_58_SS_Duplicate_ALS	SX_OB_20220322_11_53_SS_Primary_ALS	SX_OB_20220322_15_56_SS_Triplicate_ALS	SX_OB_20220322_16_02_SS_Primary_ALS
Sampling date / time				22-Mar-2022 00:00	22-Mar-2022 00:00	22-Mar-2022 00:00	22-Mar-2022 00:00	22-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	EM2205138-011	EM2205138-012	EM2205138-013	EM2205138-014	EM2205138-015
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05



Analytical Results

Sub-Matrix: DI WATER LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220322_07_57_SS_Primary_ALS	SX_OB_20220322_07_58_SS_Duplicate_ALS	SX_OB_20220322_11_53_SS_Primary_ALS	SX_OB_20220322_15_56_SS_Triplicate_ALS	SX_OB_20220322_16_02_SS_Primary_ALS
Sampling date / time				22-Mar-2022 00:00	22-Mar-2022 00:00	22-Mar-2022 00:00	22-Mar-2022 00:00	22-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	EM2205138-011	EM2205138-012	EM2205138-013	EM2205138-014	EM2205138-015
				Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231P: PFAS Sums								
Sum of PFAS	----	0.10	µg/L	<0.10	<0.10	<0.10	<0.10	<0.10
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFAS (WA DER List)	----	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	90.8	76.5	103	89.6	77.7
13C8-PFOA	----	0.02	%	93.9	101	99.8	96.4	97.9



Analytical Results

Sub-Matrix: DI WATER LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220322_20 _15_SS_Primary_ALS	SX_OB_20220323_00 _05_SS_Primary_ALS	SX_OB_20220323_04 _04_SS_Primary_ALS	----	----
Sampling date / time				22-Mar-2022 00:00	22-Mar-2022 00:00	22-Mar-2022 00:00	----	----
Compound	CAS Number	LOR	Unit	EM2205138-016	EM2205138-017	EM2205138-018	-----	-----
				Result	Result	Result	----	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	<0.02	----	----
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	<0.1	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	<0.05	----	----
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	----	----



Analytical Results

Sub-Matrix: DI WATER LEACHATE (Matrix: WATER)				Sample ID	SX_OB_20220322_20 _15_SS_Primary_ALS	SX_OB_20220323_00 _05_SS_Primary_ALS	SX_OB_20220323_04 _04_SS_Primary_ALS	----	----
Sampling date / time				22-Mar-2022 00:00	22-Mar-2022 00:00	22-Mar-2022 00:00	----	----	
Compound	CAS Number	LOR	Unit	EM2205138-016	EM2205138-017	EM2205138-018	-----	-----	
				Result	Result	Result	----	----	
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	----	----	
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	----	----	
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L	<0.05	<0.05	<0.05	----	----	
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	<0.05	<0.05	----	----	
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	----	----	
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	<0.05	----	----	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	<0.05	----	----	
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	<0.05	----	----	
EP231P: PFAS Sums									
Sum of PFAS	----	0.10	µg/L	<0.10	<0.10	<0.10	----	----	
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	----	----	
Sum of PFAS (WA DER List)	----	0.05	µg/L	<0.05	<0.05	<0.05	----	----	
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%	90.6	81.1	77.7	----	----	
13C8-PFOA	----	0.02	%	98.0	106	106	----	----	



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220322_07_57_SS_Primary_ALS	SX_OB_20220322_07_58_SS_Duplicate_ALS	SX_OB_20220322_11_53_SS_Primary_ALS	SX_OB_20220322_15_56_SS_Triplicate_ALS	SX_OB_20220322_16_02_SS_Primary_ALS
Sampling date / time				22-Mar-2022 07:57	22-Mar-2022 07:58	22-Mar-2022 11:53	22-Mar-2022 15:56	22-Mar-2022 16:02
Compound	CAS Number	LOR	Unit	EM2205138-001	EM2205138-002	EM2205138-005	EM2205138-006	EM2205138-007
				Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl ₂)	----	0.1	pH Unit	8.7	8.6	8.1	8.8	8.1
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	27.4	27.5	24.2	29.4	25.1
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	26	22	25	27	26
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	5	mg/kg	81	81	88	93	91
Copper	7440-50-8	5	mg/kg	49	47	49	56	49
Lead	7439-92-1	5	mg/kg	<5	<5	<5	<5	<5
Molybdenum	7439-98-7	5	mg/kg	<5	<5	<5	<5	<5
Nickel	7440-02-0	5	mg/kg	145	146	143	170	150
Selenium	7782-49-2	5	mg/kg	<5	<5	<5	<5	<5
Silver	7440-22-4	2	mg/kg	<2	<2	<2	<2	<2
Tin	7440-31-5	10	mg/kg	<10	<10	<10	<10	<10
Zinc	7440-66-6	5	mg/kg	78	83	77	100	82
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
EK026SF: Total CN by Segmented Flow Analyser								
Total Cyanide	57-12-5	5	mg/kg	<5	<5	<5	<5	<5
EK040T: Fluoride Total								
Fluoride	16984-48-8	100	mg/kg	140	160	130	140	140
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	9.5	9.6	9.1	9.4	9.1
After HCl pH	----	0.1	pH Unit	1.6	1.5	1.5	1.4	1.5
Extraction Fluid pH	----	0.1	pH Unit	5.0	5.0	5.0	5.0	5.0
Final pH	----	0.1	pH Unit	5.4	5.1	4.7	5.1	5.7
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220322_07_57_SS_Primary_ALS	SX_OB_20220322_07_58_SS_Duplicate_ALS	SX_OB_20220322_11_53_SS_Primary_ALS	SX_OB_20220322_15_56_SS_Triplicate_ALS	SX_OB_20220322_16_02_SS_Primary_ALS
Sampling date / time				22-Mar-2022 07:57	22-Mar-2022 07:58	22-Mar-2022 11:53	22-Mar-2022 15:56	22-Mar-2022 16:02
Compound	CAS Number	LOR	Unit	EM2205138-001	EM2205138-002	EM2205138-005	EM2205138-006	EM2205138-007
				Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons - Continued								
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of monocyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP074H: Naphthalene								
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP074I: Volatile Halogenated Compounds								
Vinyl chloride	75-01-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethene	75-35-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Methylene chloride	75-09-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	156-60-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
cis-1,2-Dichloroethene	156-59-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Chloroform	67-66-3	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1-Trichloroethane	71-55-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	56-23-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichloroethane	107-06-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethene	79-01-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	79-00-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethene	127-18-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1,2-Tetrachloroethane	630-20-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2,2-Tetrachloroethane	79-34-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Hexachlorobutadiene	87-68-3	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Chlorobenzene	108-90-7	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,4-Dichlorobenzene	106-46-7	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichlorobenzene	95-50-1	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,2,4-Trichlorobenzene	120-82-1	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
^ Sum of volatile chlorinated hydrocarbons	----	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
^ Sum of other chlorinated hydrocarbons	----	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
EP075A: Phenolic Compounds (Halogenated)								



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220322_07_57_SS_Primary_ALS	SX_OB_20220322_07_58_SS_Duplicate_ALS	SX_OB_20220322_11_53_SS_Primary_ALS	SX_OB_20220322_15_56_SS_Triplicate_ALS	SX_OB_20220322_16_02_SS_Primary_ALS
Sampling date / time				22-Mar-2022 07:57	22-Mar-2022 07:58	22-Mar-2022 11:53	22-Mar-2022 15:56	22-Mar-2022 16:02
Compound	CAS Number	LOR	Unit	EM2205138-001	EM2205138-002	EM2205138-005	EM2205138-006	EM2205138-007
				Result	Result	Result	Result	Result
EP075A: Phenolic Compounds (Halogenated) - Continued								
2-Chlorophenol	95-57-8	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
2,4-Dichlorophenol	120-83-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
2,6-Dichlorophenol	87-65-0	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
4-Chloro-3-methylphenol	59-50-7	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
2,4,5-Trichlorophenol	95-95-4	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
2,4,6-Trichlorophenol	88-06-2	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
2,3,5,6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Pentachlorophenol	87-86-5	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
^ Sum of Phenols (halogenated)	----	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
EP075A: Phenolic Compounds (Non-halogenated)								
Phenol	108-95-2	1	mg/kg	<1	<1	<1	<1	<1
2-Methylphenol	95-48-7	1	mg/kg	<1	<1	<1	<1	<1
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	<1	<1	<1
2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	<1	<1	<1
2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	<1	<1	<1
2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	<5	<5	<5
4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	<5	<5	<5
2-Methyl-4,6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	<5	<5	<5
Dinoseb	88-85-7	20	mg/kg	<20	<20	<20	<20	<20
2-Cyclohexyl-4,6-Dinitrophenol	131-89-5	20	mg/kg	<20	<20	<20	<20	<20
^ Sum of Phenols (non-halogenated)	----	20	mg/kg	<20	<20	<20	<20	<20
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220322_07_57_SS_Primary_ALS	SX_OB_20220322_07_58_SS_Duplicate_ALS	SX_OB_20220322_11_53_SS_Primary_ALS	SX_OB_20220322_15_56_SS_Triplicate_ALS	SX_OB_20220322_16_02_SS_Primary_ALS
Sampling date / time				22-Mar-2022 07:57	22-Mar-2022 07:58	22-Mar-2022 11:53	22-Mar-2022 15:56	22-Mar-2022 16:02
Compound	CAS Number	LOR	Unit	EM2205138-001	EM2205138-002	EM2205138-005	EM2205138-006	EM2205138-007
				Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	0.6	0.6	0.6	0.6	0.6
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	1.2	1.2	1.2	1.2	1.2
EP075I: Organochlorine Pesticides								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
Endosulfan 1	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan 2	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4'-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4'-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of organochlorine pesticides	----	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220322_07_57_SS_Primary_ALS	SX_OB_20220322_07_58_SS_Duplicate_ALS	SX_OB_20220322_11_53_SS_Primary_ALS	SX_OB_20220322_15_56_SS_Triplicate_ALS	SX_OB_20220322_16_02_SS_Primary_ALS
Sampling date / time				22-Mar-2022 07:57	22-Mar-2022 07:58	22-Mar-2022 11:53	22-Mar-2022 15:56	22-Mar-2022 16:02
Compound	CAS Number	LOR	Unit	EM2205138-001	EM2205138-002	EM2205138-005	EM2205138-006	EM2205138-007
				Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued								
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.30	mg/kg	<0.30	<0.30	<0.30	<0.30	<0.30
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/5 0-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Chlordane	57-74-9	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
^ Sum of other organochlorine pesticides	----	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	mg/kg	<20	<20	<20	<20	<20
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C6 - C10 Fraction	C6_C10	20	mg/kg	<20	<20	<20	<20	<20
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	mg/kg	<20	<20	<20	<20	<20
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorodecane sulfonic acid (PFDS)	335-77-3	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220322_07_57_SS_Primary_ALS	SX_OB_20220322_07_58_SS_Duplicate_ALS	SX_OB_20220322_11_53_SS_Primary_ALS	SX_OB_20220322_15_56_SS_Triplicate_ALS	SX_OB_20220322_16_02_SS_Primary_ALS
Sampling date / time				22-Mar-2022 07:57	22-Mar-2022 07:58	22-Mar-2022 11:53	22-Mar-2022 15:56	22-Mar-2022 16:02
Compound	CAS Number	LOR	Unit	EM2205138-001	EM2205138-002	EM2205138-005	EM2205138-006	EM2205138-007
				Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	5	µg/kg	<5	<5	<5	<5	<5
Perfluoropentanoic acid (PFPeA)	2706-90-3	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorohexanoic acid (PFHxA)	307-24-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoroheptanoic acid (PFHpA)	375-85-9	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorooctanoic acid (PFOA)	335-67-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorononanoic acid (PFNA)	375-95-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorodecanoic acid (PFDA)	335-76-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorododecanoic acid (PFDoDA)	307-55-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
EP231D: (n:2) Fluorotelomer Sulfonic Acids								



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220322_07_57_SS_Primary_ALS	SX_OB_20220322_07_58_SS_Duplicate_ALS	SX_OB_20220322_11_53_SS_Primary_ALS	SX_OB_20220322_15_56_SS_Triplicate_ALS	SX_OB_20220322_16_02_SS_Primary_ALS
Sampling date / time				22-Mar-2022 07:57	22-Mar-2022 07:58	22-Mar-2022 11:53	22-Mar-2022 15:56	22-Mar-2022 16:02
Compound	CAS Number	LOR	Unit	EM2205138-001	EM2205138-002	EM2205138-005	EM2205138-006	EM2205138-007
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
EP231P: PFAS Sums								
Sum of PFAS	----	50.0	µg/kg	<50.0	<50.0	<50.0	<50.0	<50.0
Sum of PFHxS and PFOS	355-46-4/1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Sum of PFAS (WA DER List)	----	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	120	122	122	119	118
EP074S: VOC Surrogates (Ultra-Trace)								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	72.1	85.4	77.2	82.2	76.7
Toluene-D8	2037-26-5	0.1	%	65.4	82.8	75.6	81.8	76.0
4-Bromofluorobenzene	460-00-4	0.1	%	72.4	83.7	78.2	82.6	77.9
EP075S: Acid Extractable Surrogates (Waste Classification)								
Phenol-d6	13127-88-3	0.025	%	96.6	89.0	101	90.1	103
2-Chlorophenol-D4	93951-73-6	0.025	%	95.0	88.1	96.9	86.5	95.6
2,4,6-Tribromophenol	118-79-6	0.025	%	87.6	84.9	91.2	83.9	91.2
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)								
Nitrobenzene-D5	4165-60-0	0.025	%	100	90.7	102	97.4	97.8
1,2-Dichlorobenzene-D4	2199-69-1	0.025	%	91.2	83.5	92.9	87.8	87.7
2-Fluorobiphenyl	321-60-8	0.025	%	98.0	92.7	99.8	95.1	99.0
Anthracene-d10	1719-06-8	0.025	%	96.6	92.7	100.0	94.1	97.3
4-Terphenyl-d14	1718-51-0	0.025	%	93.8	90.6	99.6	92.2	98.1
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	91.6	79.2	79.8	87.4	90.6
13C8-PFOA	----	0.0002	%	116	108	105	103	106



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220322_20_15_SS_Primary_ALS	SX_OB_20220323_00_05_SS_Primary_ALS	SX_OB_20220323_04_04_SS_Primary_ALS	SX_OB_20220322_07_57_SS_Primary_ALS	SX_OB_20220322_07_58_SS_Duplicate_ALS
Sampling date / time				22-Mar-2022 20:15	22-Mar-2022 00:05	22-Mar-2022 04:04	22-Mar-2022 00:00	22-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	EM2205138-008	EM2205138-009	EM2205138-010	EM2205138-011	EM2205138-012
				Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl2)	----	0.1	pH Unit	8.6	7.8	7.8	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	28.8	27.7	27.3	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	23	27	19	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	----	----
Chromium	7440-47-3	5	mg/kg	84	108	104	----	----
Copper	7440-50-8	5	mg/kg	49	54	50	----	----
Lead	7439-92-1	5	mg/kg	<5	<5	<5	----	----
Molybdenum	7439-98-7	5	mg/kg	<5	<5	<5	----	----
Nickel	7440-02-0	5	mg/kg	145	167	154	----	----
Selenium	7782-49-2	5	mg/kg	<5	<5	<5	----	----
Silver	7440-22-4	2	mg/kg	<2	<2	<2	----	----
Tin	7440-31-5	10	mg/kg	<10	<10	<10	----	----
Zinc	7440-66-6	5	mg/kg	76	100	85	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	----	----
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	1.0	mg/kg	<1.0	<1.0	<1.0	----	----
EK026SF: Total CN by Segmented Flow Analyser								
Total Cyanide	57-12-5	5	mg/kg	<5	<5	<5	----	----
EK040T: Fluoride Total								
Fluoride	16984-48-8	100	mg/kg	160	140	140	----	----
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	9.5	8.6	8.7	----	----
After HCl pH	----	0.1	pH Unit	1.5	1.5	1.5	----	----
Extraction Fluid pH	----	0.1	pH Unit	5.0	5.0	5.0	----	----
Final pH	----	0.1	pH Unit	5.1	4.4	5.3	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	----	----	----	9.8	10.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220322_20_15_SS_Primary_ALS	SX_OB_20220323_00_05_SS_Primary_ALS	SX_OB_20220323_04_04_SS_Primary_ALS	SX_OB_20220322_07_57_SS_Primary_ALS	SX_OB_20220322_07_58_SS_Duplicate_ALS
Sampling date / time				22-Mar-2022 20:15	22-Mar-2022 00:05	22-Mar-2022 04:04	22-Mar-2022 00:00	22-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	EM2205138-008	EM2205138-009	EM2205138-010	EM2205138-011	EM2205138-012
				Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Sum of monocyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
EP074H: Naphthalene								
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	----	----
EP074I: Volatile Halogenated Compounds								
Vinyl chloride	75-01-4	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1,1-Dichloroethene	75-35-4	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
Methylene chloride	75-09-2	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
trans-1,2-Dichloroethene	156-60-5	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
cis-1,2-Dichloroethene	156-59-2	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
Chloroform	67-66-3	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1,1,1-Trichloroethane	71-55-6	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
Carbon Tetrachloride	56-23-5	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1,2-Dichloroethane	107-06-2	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
Trichloroethene	79-01-6	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1,1,2-Trichloroethane	79-00-5	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
Tetrachloroethene	127-18-4	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1,1,1,2-Tetrachloroethane	630-20-6	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1,1,2,2-Tetrachloroethane	79-34-5	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
Hexachlorobutadiene	87-68-3	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
Chlorobenzene	108-90-7	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1,4-Dichlorobenzene	106-46-7	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1,2-Dichlorobenzene	95-50-1	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1,2,4-Trichlorobenzene	120-82-1	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
^ Sum of volatile chlorinated hydrocarbons	----	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
^ Sum of other chlorinated hydrocarbons	----	0.50	mg/kg	<0.50	<0.50	<0.50	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220322_20_15_SS_Primary_ALS	SX_OB_20220323_00_05_SS_Primary_ALS	SX_OB_20220323_04_04_SS_Primary_ALS	SX_OB_20220322_07_57_SS_Primary_ALS	SX_OB_20220322_07_58_SS_Duplicate_ALS
Sampling date / time				22-Mar-2022 20:15	22-Mar-2022 00:05	22-Mar-2022 04:04	22-Mar-2022 00:00	22-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	EM2205138-008	EM2205138-009	EM2205138-010	EM2205138-011	EM2205138-012
				Result	Result	Result	Result	Result
EP075A: Phenolic Compounds (Halogenated)								
2-Chlorophenol	95-57-8	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
2,4-Dichlorophenol	120-83-2	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
2,6-Dichlorophenol	87-65-0	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
4-Chloro-3-methylphenol	59-50-7	1.00	mg/kg	<1.00	<1.00	<1.00	----	----
2,4,5-Trichlorophenol	95-95-4	1.00	mg/kg	<1.00	<1.00	<1.00	----	----
2,4,6-Trichlorophenol	88-06-2	1.00	mg/kg	<1.00	<1.00	<1.00	----	----
2,3,5,6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Pentachlorophenol	87-86-5	1.0	mg/kg	<1.0	<1.0	<1.0	----	----
^ Sum of Phenols (halogenated)	----	1.00	mg/kg	<1.00	<1.00	<1.00	----	----
EP075A: Phenolic Compounds (Non-halogenated)								
Phenol	108-95-2	1	mg/kg	<1	<1	<1	----	----
2-Methylphenol	95-48-7	1	mg/kg	<1	<1	<1	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	<1	----	----
2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	<1	----	----
2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	<1	----	----
2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	<5	----	----
4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	<5	----	----
2-Methyl-4,6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	<5	----	----
Dinoseb	88-85-7	20	mg/kg	<20	<20	<20	----	----
2-Cyclohexyl-4,6-Dinitrophenol	131-89-5	20	mg/kg	<20	<20	<20	----	----
^ Sum of Phenols (non-halogenated)	----	20	mg/kg	<20	<20	<20	----	----
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220322_20_15_SS_Primary_ALS	SX_OB_20220323_00_05_SS_Primary_ALS	SX_OB_20220323_04_04_SS_Primary_ALS	SX_OB_20220322_07_57_SS_Primary_ALS	SX_OB_20220322_07_58_SS_Duplicate_ALS
Sampling date / time				22-Mar-2022 20:15	22-Mar-2022 00:05	22-Mar-2022 04:04	22-Mar-2022 00:00	22-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	EM2205138-008	EM2205138-009	EM2205138-010	EM2205138-011	EM2205138-012
				Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg	<1.0	<1.0	<1.0	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	0.6	0.6	0.6	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	1.2	1.2	1.2	----	----
EP075I: Organochlorine Pesticides								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
Endosulfan 1	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endosulfan 2	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Methoxychlor	72-43-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
^ Sum of organochlorine pesticides	----	0.10	mg/kg	<0.10	<0.10	<0.10	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220322_20_15_SS_Primary_ALS	SX_OB_20220323_00_05_SS_Primary_ALS	SX_OB_20220323_04_04_SS_Primary_ALS	SX_OB_20220322_07_57_SS_Primary_ALS	SX_OB_20220322_07_58_SS_Duplicate_ALS
		Sampling date / time		22-Mar-2022 20:15	22-Mar-2022 00:05	22-Mar-2022 04:04	22-Mar-2022 00:00	22-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	EM2205138-008	EM2205138-009	EM2205138-010	EM2205138-011	EM2205138-012
				Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued								
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.30	mg/kg	<0.30	<0.30	<0.30	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/5 0-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
^ Chlordane	57-74-9	0.10	mg/kg	<0.10	<0.10	<0.10	----	----
^ Sum of other organochlorine pesticides	----	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	mg/kg	<20	<20	<20	----	----
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	----	----
C6 - C10 Fraction	C6_C10	20	mg/kg	<20	<20	<20	----	----
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	----	----
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	----	----
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	<100	----	----
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	----	----
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	----	----
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	mg/kg	<20	<20	<20	----	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	5.0	µg/kg	<5.0	<5.0	<5.0	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220322_20_15_SS_Primary_ALS	SX_OB_20220323_00_05_SS_Primary_ALS	SX_OB_20220323_04_04_SS_Primary_ALS	SX_OB_20220322_07_57_SS_Primary_ALS	SX_OB_20220322_07_58_SS_Duplicate_ALS
				22-Mar-2022 20:15	22-Mar-2022 00:05	22-Mar-2022 04:04	22-Mar-2022 00:00	22-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	EM2205138-008	EM2205138-009	EM2205138-010	EM2205138-011	EM2205138-012
				Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	5	µg/kg	<5	<5	<5	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorononanoic acid (PFNA)	375-95-1	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	10.0	µg/kg	<10.0	<10.0	<10.0	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	10.0	µg/kg	<10.0	<10.0	<10.0	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids								



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220322_20_15_SS_Primary_ALS	SX_OB_20220323_00_05_SS_Primary_ALS	SX_OB_20220323_04_04_SS_Primary_ALS	SX_OB_20220322_07_57_SS_Primary_ALS	SX_OB_20220322_07_58_SS_Duplicate_ALS
Sampling date / time				22-Mar-2022 20:15	22-Mar-2022 00:05	22-Mar-2022 04:04	22-Mar-2022 00:00	22-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	EM2205138-008	EM2205138-009	EM2205138-010	EM2205138-011	EM2205138-012
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	10.0	µg/kg	<10.0	<10.0	<10.0	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
EP231P: PFAS Sums								
Sum of PFAS	----	50.0	µg/kg	<50.0	<50.0	<50.0	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Sum of PFAS (WA DER List)	----	10.0	µg/kg	<10.0	<10.0	<10.0	----	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	122	118	108	----	----
EP074S: VOC Surrogates (Ultra-Trace)								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	87.3	88.2	80.3	----	----
Toluene-D8	2037-26-5	0.1	%	84.0	85.8	78.4	----	----
4-Bromofluorobenzene	460-00-4	0.1	%	85.2	86.2	81.6	----	----
EP075S: Acid Extractable Surrogates (Waste Classification)								
Phenol-d6	13127-88-3	0.025	%	90.7	89.0	87.4	----	----
2-Chlorophenol-D4	93951-73-6	0.025	%	82.8	87.2	81.1	----	----
2,4,6-Tribromophenol	118-79-6	0.025	%	82.7	86.4	70.2	----	----
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)								
Nitrobenzene-D5	4165-60-0	0.025	%	91.3	95.9	87.4	----	----
1,2-Dichlorobenzene-D4	2199-69-1	0.025	%	81.1	85.8	77.1	----	----
2-Fluorobiphenyl	321-60-8	0.025	%	91.8	94.0	80.2	----	----
Anthracene-d10	1719-06-8	0.025	%	90.0	92.8	78.4	----	----
4-Terphenyl-d14	1718-51-0	0.025	%	89.6	90.8	78.2	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	94.0	90.6	82.2	----	----
13C8-PFOA	----	0.0002	%	108	109	108	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220322_11 _53_SS_Primary_ALS	SX_OB_20220322_15 _56_SS_Triplicate_AL S	SX_OB_20220322_16 _02_SS_Primary_ALS	SX_OB_20220322_20 _15_SS_Primary_ALS	SX_OB_20220323_00 _05_SS_Primary_ALS
Sampling date / time				22-Mar-2022 00:00	22-Mar-2022 00:00	22-Mar-2022 00:00	22-Mar-2022 00:00	22-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	EM2205138-013	EM2205138-014	EM2205138-015	EM2205138-016	EM2205138-017
				Result	Result	Result	Result	Result
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	9.7	9.9	9.2	10.1	9.4



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SX_OB_20220323_04 _04_SS_Primary_ALS	----	----	----	----
			Sampling date / time	22-Mar-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	EM2205138-018	-----	-----	-----	-----
				Result	----	----	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	9.4	----	----	----	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID		SX_OB_20220322_08 _17_SR_Rinsate_ALS	SX_OB_20220322_08 _19_SB_Blank_ALS	----	----	----
Sampling date / time				22-Mar-2022 08:17	22-Mar-2022 08:19	----	----	----	----	----
Compound	CAS Number	LOR	Unit	EM2205138-003	EM2205138-004	-----	-----	-----	-----	-----
				Result	Result	---	---	---	---	---
EP231A: Perfluoroalkyl Sulfonic Acids										
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	----	----	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	----	----	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	----	----	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	----	----	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	----	----	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	----	----	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids										
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	----	----	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	----	----	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	----	----	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	----	----	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	----	----	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	----	----	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	----	----	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	----	----	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	----	----	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	----	----	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	----	----	----	----	----
EP231C: Perfluoroalkyl Sulfonamides										
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	----	----	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	----	----	----	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	----	----	----	----	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SX_OB_20220322_08 _17_SR_Rinsate_ALS	SX_OB_20220322_08 _19_SB_Blank_ALS	----	----	----
Sampling date / time				22-Mar-2022 08:17	22-Mar-2022 08:19	----	----	----	
Compound	CAS Number	LOR	Unit	EM2205138-003	EM2205138-004	-----	-----	-----	
				Result	Result	---	---	---	
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	----	----	----	
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	----	----	----	
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	----	----	----	
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	----	----	----	
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	----	----	----	
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	----	----	----	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	----	----	----	
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	----	----	----	
EP231P: PFAS Sums									
Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	----	----	----	
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	----	----	----	
Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	----	----	----	
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%	79.7	77.8	----	----	----	
13C8-PFOA	----	0.02	%	97.7	98.4	----	----	----	



Surrogate Control Limits

Sub-Matrix: ASLP LEACHATE		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP231S: PFAS Surrogate			
13C4-PFOS	----	65	140
13C8-PFOA	----	71	133

Sub-Matrix: DI WATER LEACHATE		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP231S: PFAS Surrogate			
13C4-PFOS	----	65	140
13C8-PFOA	----	71	133

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	41	122
EP074S: VOC Surrogates (Ultra-Trace)			
1,2-Dichloroethane-D4	17060-07-0	59	119
Toluene-D8	2037-26-5	55	117
4-Bromofluorobenzene	460-00-4	59	123
EP075S: Acid Extractable Surrogates (Waste Classification)			
Phenol-d6	13127-88-3	63	134
2-Chlorophenol-D4	93951-73-6	60	125
2,4,6-Tribromophenol	118-79-6	54	129
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)			
Nitrobenzene-D5	4165-60-0	63	131
1,2-Dichlorobenzene-D4	2199-69-1	61	124
2-Fluorobiphenyl	321-60-8	69	131
Anthracene-d10	1719-06-8	70	133
4-Terphenyl-d14	1718-51-0	59	141
EP231S: PFAS Surrogate			
13C4-PFOS	----	68	136
13C8-PFOA	----	69	133

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP231S: PFAS Surrogate			
13C4-PFOS	----	65	140
13C8-PFOA	----	71	133

QUALITY CONTROL REPORT

Work Order	: EM2205138	Page	: 1 of 27
Client	: AGON ENVIRONMENTAL PTY LTD	Laboratory	: Environmental Division Melbourne
Contact	: DAVID LAWSON	Contact	: Bronwyn Sheen
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 23-Mar-2022
Order number	: ----	Date Analysis Commenced	: 24-Mar-2022
C-O-C number	: 20220323044928-ALS-12	Issue Date	: 30-Mar-2022
Sampler	: HK - EP Risk		
Site	: 20220323044928-ALS-12		
Quote number	: EN/150/19 -WGTP -Bulk Sample Quote		
No. of samples received	: 18		
No. of samples analysed	: 18		



This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Jarwis Nheu	Senior Inorganic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Organics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC



General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key :
 Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
 CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
 LOR = Limit of reporting
 RPD = Relative Percentage Difference
 # = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4251889)									
EM2204774-001	Anonymous	EG005T: Nickel	7440-02-0	2	mg/kg	59	49	18.7	0% - 20%
EM2204774-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	6	12	67.9	No Limit
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	13	23	57.2	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	56	86	41.1	0% - 50%
EM2205097-003	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	27	24	10.2	0% - 50%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	7	6	0.0	No Limit
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	6	6	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	14	16	13.5	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	5	6	19.1	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<5	<5	0.0	No Limit
EG005T: Zinc	7440-66-6	5	mg/kg	12	10	20.0	No Limit		
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4253867)									
EM2205040-034	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	8.3	8.4	0.0	0% - 20%



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)	
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4253867) - continued										
EM2205138-001	SX_OB_20220322_07_57_ SS_Primary_ALS	EA001: pH (CaCl2)	----	0.1	pH Unit	8.7	8.7	0.0	0% - 20%	
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4252369)										
EM2205138-001	SX_OB_20220322_07_57_ SS_Primary_ALS	EA055: Moisture Content	----	0.1	%	27.4	27.7	0.9	0% - 20%	
EM2205183-006	Anonymous	EA055: Moisture Content	----	0.1	%	3.3	5.7	53.2	No Limit	
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4251888)										
EM2204774-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit	
EM2205097-003	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit	
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4251935)										
EM2205093-002	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
EM2205127-059	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 4252434)										
EM2205127-022	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit	
EM2205138-009	SX_OB_20220323_00_05_ SS_Primary_ALS	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<5	<5	0.0	No Limit	
EK040T: Fluoride Total (QC Lot: 4251947)										
EM2205138-001	SX_OB_20220322_07_57_ SS_Primary_ALS	EK040T: Fluoride	16984-48-8	40	mg/kg	140	130	0.0	No Limit	
EM2205165-004	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	50	60	0.0	No Limit	
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4250065)										
EM2205040-001	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit	
EM2205040-013	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit	
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4247569)										
EM2205138-001	SX_OB_20220322_07_57_ SS_Primary_ALS	EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit	
		EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
		EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
		EP074-UT: meta- & para-Xylene	108-38-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			106-42-3							
		EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit			
EP074H: Naphthalene (QC Lot: 4247569)										
EM2205138-001	SX_OB_20220322_07_57_ SS_Primary_ALS	EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit	
EP074I: Volatile Halogenated Compounds (QC Lot: 4247569)										
EM2205138-001	SX_OB_20220322_07_57_ SS_Primary_ALS	EP074-UT: 1,1-Dichloroethene	75-35-4	0.01	mg/kg	<0.50	<0.50	0.0	No Limit	
		EP074-UT: cis-1,2-Dichloroethene	156-59-2	0.01	mg/kg	<0.50	<0.50	0.0	No Limit	



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP074I: Volatile Halogenated Compounds (QC Lot: 4247569) - continued									
EM2205138-001	SX_OB_20220322_07_57_ SS_Primary_ALS	EP074-UT: 1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
EP074-UT: 1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.50	<0.50	0.0	No Limit		
EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.5	<0.5	0.0	No Limit		
EP075A: Phenolic Compounds (Halogenated) (QC Lot: 4250064)									
EM2205040-001	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit		
EM2205040-013	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit		
EP075A: Phenolic Compounds (Non-halogenated) (QC Lot: 4250064)									



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)	
EP075A: Phenolic Compounds (Non-halogenated) (QC Lot: 4250064) - continued										
EM2205040-001	Anonymous	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit	
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit	
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit	
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit	
		EP075-EM: 2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit	
		EP075-EM: 2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit	
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit	
		EP075-EM: 2-Methyl-4,6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit	
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	<5	0.0	No Limit	
		EP075-EM: 2-Cyclohexyl-4,6-Dinitrophenol	131-89-5	5	mg/kg	<5	<5	0.0	No Limit	
EM2205040-013	Anonymous	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit	
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit	
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit	
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit	
		EP075-EM: 2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit	
		EP075-EM: 2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit	
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit	
		EP075-EM: 2-Methyl-4,6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit	
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	<5	0.0	No Limit	
		EP075-EM: 2-Cyclohexyl-4,6-Dinitrophenol	131-89-5	5	mg/kg	<5	<5	0.0	No Limit	
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4250064)										
EM2205040-001	Anonymous	EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	1.3	0.6	76.1	No Limit	
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	2.2	1.3	51.8	No Limit	
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	2.0	1.3	43.7	No Limit	
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	1.1	0.9	21.2	No Limit	
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	1.0	0.8	12.7	No Limit	
		EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	1.1	1.0	13.6	No Limit	
		EP075-EM: Indeno(1,2,3-cd)pyrene	193-39-5	0.5	mg/kg	0.6	0.6	0.0	No Limit	
		EP075-EM: Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
		EP075-EM: Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	0.8	0.7	0.0	No Limit	
		EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2	1	mg/kg	2.2	1.9	13.9	No Limit	
				207-08-9						
		EM2205040-001	Anonymous	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0
EP075-EM: Acenaphthene	83-32-9			0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
EP075-EM: Acenaphthylene	208-96-8			0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
EP075-EM: Fluorene	86-73-7			0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
EM2205040-013	Anonymous	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4250064) - continued									
EM2205040-013	Anonymous	EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EP075I: Organochlorine Pesticides (QC Lot: 4250064)									
EM2205040-001	Anonymous	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4,4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EP075-EM: 4,4'-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
EP075-EM: 4,4'-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit		
EM2205040-013	Anonymous	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP075I: Organochlorine Pesticides (QC Lot: 4250064) - continued									
EM2205040-013	Anonymous	EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4,4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4,4'-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4,4'-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4247569)									
EM2205138-001	SX_OB_20220322_07_57_ SS_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<20	<20	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4250066)									
EM2205040-001	Anonymous	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	170	120	32.3	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	170	120	34.5	No Limit
EM2205040-013	Anonymous	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4247569)									
EM2205138-001	SX_OB_20220322_07_57_ SS_Primary_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<20	<20	0.0	No Limit
		EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4250066)									
EM2205040-001	Anonymous	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	220	150	36.2	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	220	150	37.8	No Limit
EM2205040-013	Anonymous	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4250189)									
EM2205020-001	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EM2205138-001	SX_OB_20220322_07_57_ SS_Primary_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit		
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4250189)									
EM2205020-001	Anonymous	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
		EM2205138-001	SX_OB_20220322_07_57_ SS_Primary_ALS	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<5.0 µg/kg	<0.0050
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4			0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9			0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1			0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231X: Perfluorononanoic acid (PFNA)	375-95-1			0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2			0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8			0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1			0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8			0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7			0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4			0.001	mg/kg	<5 µg/kg	<0.005	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4250189)									
EM2205020-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4250189) - continued									
EM2205020-001	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EM2205138-001	SX_OB_20220322_07_57_SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4250189)									
EM2205020-001	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EM2205138-001	SX_OB_20220322_07_57_SS_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4250189) - continued									
EM2205138-001	SX_OB_20220322_07_57_SS_Primary_ALS	EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4250189)									
EM2205020-001	Anonymous	EP231X: Sum of PFAS	----	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EM2205138-001	SX_OB_20220322_07_57_SS_Primary_ALS	EP231X: Sum of PFAS	----	0.0002	mg/kg	<50.0 µg/kg	<0.0500	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit

Sub-Matrix: WATER				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4255109)									
EM2204516-001	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EM2205138-006	SX_OB_20220322_15_56_SS_Triplicate_ALS	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4255148)									
EM2204516-010	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EM2205138-014	SX_OB_20220322_15_56_SS_Triplicate_ALS	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit



Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4255148) - continued									
EM2205138-014	SX_OB_20220322_15_56_ SS_Triplicate_ALS	EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4255109)									
EM2204516-001	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2205138-006	SX_OB_20220322_15_56_ SS_Triplicate_ALS	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4255148)	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit		



Sub-Matrix: WATER				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4255148) - continued									
EM2205138-014	SX_OB_20220322_15_56_ SS_Triplicate_ALS	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit		
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4255109)									
EM2204516-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2205138-006	SX_OB_20220322_15_56_ SS_Triplicate_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4255148)									



Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4255148) - continued									
EM2204516-010	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2205138-014	SX_OB_20220322_15_56_ SS_Triplicate_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4255109)									
EM2204516-001	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2205138-006	SX_OB_20220322_15_56_ SS_Triplicate_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit



Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4255109) - continued									
EM2205138-006	SX_OB_20220322_15_56_ SS_Triplicate_ALS	EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4255148)									
EM2204516-010	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2205138-014	SX_OB_20220322_15_56_ SS_Triplicate_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4255109)									
EM2204516-001	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EM2205138-006	SX_OB_20220322_15_56_ SS_Triplicate_ALS	EP231X: Sum of PFAS	----	0.01	µg/L	<0.10	<0.10	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.05	<0.05	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4255148)									
EM2204516-010	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EM2205138-014	SX_OB_20220322_15_56_ SS_Triplicate_ALS	EP231X: Sum of PFAS	----	0.01	µg/L	<0.10	<0.10	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.05	<0.05	0.0	No Limit



Method Blank (MB) and Laboratory Control Sample (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
				Result	Spike Concentration	Spike Recovery (%) LCS	Acceptable Limits (%) Low High	
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4251889)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	123 mg/kg	91.0	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1.23 mg/kg	61.9	50.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	100	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.9 mg/kg	94.5	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.4 mg/kg	95.9	70.0	130
EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	2.19 mg/kg	91.5	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	95.5	70.0	130
EG005T: Selenium	7782-49-2	5	mg/kg	<5	----	----	----	----
EG005T: Silver	7440-22-4	2	mg/kg	<2	2.9 mg/kg	73.7	70.0	130
EG005T: Tin	7440-31-5	5	mg/kg	<5	5.33 mg/kg	97.9	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	73.1	70.0	130
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel) (QCLot: 4249585)								
EN60-DIa-P: Final pH	----	0.1	pH Unit	7.2	----	----	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel) (QCLot: 4249586)								
EN60-DIa-P: Final pH	----	0.1	pH Unit	7.2	----	----	----	----
EA001: pH in soil using 0.01M CaCl extract (QCLot: 4253867)								
EA001: pH (CaCl2)	----	----	pH Unit	----	4 pH Unit	101	98.8	101
					7 pH Unit	101	99.3	101
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4251888)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	93.0	70.0	130
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4251935)								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	80.3	70.0	130
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4252434)								
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	88.7	70.0	130
EK040T: Fluoride Total (QCLot: 4251947)								
EK040T: Fluoride	16984-48-8	40	mg/kg	<40	400 mg/kg	94.3	75.2	110
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4250065)								
EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	120	67.4	136
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4247569)								
EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	2.1 mg/kg	92.1	69.2	116
EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	2.1 mg/kg	94.0	67.7	116
EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2.1 mg/kg	94.6	66.6	115



Sub-Matrix: SOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
				Result	Spike	Spike Recovery (%)	Acceptable Limits (%)	
					Concentration	LCS	Low	High
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4247569) - continued								
EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4.2 mg/kg	95.4	65.2	112
EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	2.1 mg/kg	94.1	69.4	111
EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2.1 mg/kg	91.7	68.4	110
EP074H: Naphthalene (QCLot: 4247569)								
EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	0.6 mg/kg	91.3	72.3	114
EP074I: Volatile Halogenated Compounds (QCLot: 4247569)								
EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	0.1 mg/kg	76.8	47.0	138
EP074-UT: 1,1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	0.1 mg/kg	92.8	57.6	125
EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.4	2.1 mg/kg	90.0	72.3	115
EP074-UT: trans-1,2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	0.1 mg/kg	93.0	60.5	122
EP074-UT: cis-1,2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	0.1 mg/kg	92.7	70.3	112
EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.02	0.1 mg/kg	89.5	66.6	115
EP074-UT: 1,1,1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	0.1 mg/kg	93.0	64.4	122
EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	0.1 mg/kg	94.0	58.4	127
EP074-UT: 1,2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	0.1 mg/kg	107	72.9	114
EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.02	0.1 mg/kg	93.6	64.7	115
EP074-UT: 1,1,2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	0.1 mg/kg	93.7	72.6	116
EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	0.1 mg/kg	97.6	60.0	119
EP074-UT: 1,1,1,2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	0.1 mg/kg	93.2	71.8	116
EP074-UT: 1,1,2,2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	0.1 mg/kg	91.8	66.1	116
EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	0.1 mg/kg	96.0	39.8	128
EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	0.1 mg/kg	93.3	70.3	113
EP074-UT: 1,4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	0.1 mg/kg	95.4	62.6	113
EP074-UT: 1,2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	0.1 mg/kg	92.2	70.8	110
EP074-UT: 1,2,4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	0.1 mg/kg	93.1	48.4	120
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4250064)								
EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	2 mg/kg	104	74.5	126
EP075-EM: 2,4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	2 mg/kg	96.0	72.7	126
EP075-EM: 2,6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	2 mg/kg	97.1	73.5	132
EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	2 mg/kg	98.7	72.8	128
EP075-EM: 2,4,5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	2 mg/kg	97.2	73.3	134
EP075-EM: 2,4,6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	2 mg/kg	96.4	72.4	128
EP075-EM: 2,3,5,6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	2 mg/kg	93.1	69.4	126
EP075-EM: 2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4901-51-3/5 8-90-2	0.05	mg/kg	<0.05	4 mg/kg	101	71.9	128
EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	4 mg/kg	88.0	54.4	135
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4250064)								



Sub-Matrix: SOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report				
				Result	Spike	Spike Recovery (%)		Acceptable Limits (%)	
					Concentration	LCS	Low	High	
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4250064) - continued									
EP075-EM: Phenol	108-95-2	1	mg/kg	<1	2 mg/kg	92.4	71.5	130	
EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	2 mg/kg	94.3	73.4	129	
EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	4 mg/kg	97.2	74.3	129	
EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	2 mg/kg	93.8	70.9	133	
EP075-EM: 2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	2 mg/kg	94.3	71.8	132	
EP075-EM: 2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	10 mg/kg	66.7	41.0	156	
EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	10 mg/kg	90.6	65.3	134	
EP075-EM: 2-Methyl-4,6-dinitrophenol	8071-51-0	5	mg/kg	<5	10 mg/kg	77.5	43.6	128	
EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	10 mg/kg	85.7	62.0	128	
EP075-EM: 2-Cyclohexyl-4,6-Dinitrophenol	131-89-5	5	mg/kg	<5	10 mg/kg	69.8	34.5	137	
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4250064)									
EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2 mg/kg	97.3	73.0	131	
EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2 mg/kg	94.6	76.3	130	
EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2 mg/kg	95.7	72.0	135	
EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	2 mg/kg	98.1	74.4	131	
EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	2 mg/kg	98.0	73.3	130	
EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	2 mg/kg	97.1	78.4	127	
EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	2 mg/kg	97.1	75.3	132	
EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	2 mg/kg	99.6	75.4	130	
EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	2 mg/kg	102	69.6	133	
EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	2 mg/kg	102	75.0	133	
EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	4 mg/kg	103	75.8	133	
EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	2 mg/kg	102	65.1	130	
EP075-EM: Indeno(1,2,3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	2 mg/kg	101	72.1	134	
EP075-EM: Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	2 mg/kg	101	72.9	135	
EP075-EM: Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	2 mg/kg	100	71.3	134	
EP075I: Organochlorine Pesticides (QCLot: 4250064)									
EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	2 mg/kg	98.4	71.0	129	
EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	2 mg/kg	94.9	74.8	126	
EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	2 mg/kg	103	75.7	130	
EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	2 mg/kg	101	70.8	130	
EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	2 mg/kg	103	76.5	134	
EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	2 mg/kg	94.3	75.5	131	
EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	2 mg/kg	96.4	76.8	130	
EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	2 mg/kg	94.1	73.6	130	
EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	2 mg/kg	97.5	75.0	133	
EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	2 mg/kg	97.0	75.3	131	
EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	2 mg/kg	101	69.4	134	



Sub-Matrix: SOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report				
				Result	Spike	Spike Recovery (%)		Acceptable Limits (%)	
					Concentration	LCS	Low	High	
EP075I: Organochlorine Pesticides (QCLot: 4250064) - continued									
EP075-EM: 4.4'-DDE	72-55-9	0.05	mg/kg	<0.05	2 mg/kg	95.0	71.0	132	
EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	2 mg/kg	99.9	78.0	133	
EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	2 mg/kg	115	69.0	143	
EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	2 mg/kg	77.3	55.7	145	
EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	2 mg/kg	104	71.4	135	
EP075-EM: 4.4'-DDD	72-54-8	0.05	mg/kg	<0.05	2 mg/kg	101	74.8	134	
EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	2 mg/kg	103	70.2	135	
EP075-EM: 4.4'-DDT	50-29-3	0.05	mg/kg	<0.05	2 mg/kg	99.1	77.7	133	
EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	2 mg/kg	99.9	63.6	135	
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4247569)									
EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<10	39.6 mg/kg	91.7	61.1	119	
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4250066)									
EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	760 mg/kg	91.3	74.4	129	
EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	3270 mg/kg	89.2	81.0	123	
EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	1550 mg/kg	85.9	81.8	121	
EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	5580 mg/kg	88.5	70.0	130	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4247569)									
EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	48.9 mg/kg	91.8	59.9	119	
EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	----	----	----	----	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4250066)									
EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	1110 mg/kg	87.5	75.4	132	
EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	4180 mg/kg	86.8	80.8	120	
EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	290 mg/kg	88.9	73.3	136	
EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	5580 mg/kg	87.1	70.0	130	
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4250189)									
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00111 mg/kg	91.3	72.0	128	
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00118 mg/kg	98.1	73.0	123	
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.0014 mg/kg	72.4	67.0	130	
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00119 mg/kg	85.6	70.0	132	
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00116 mg/kg	88.3	68.0	136	
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00121 mg/kg	89.3	59.0	134	
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4250189)									
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	89.5	71.0	135	
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	91.6	69.0	132	
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	89.6	70.0	132	
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	92.1	71.0	131	
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	89.5	69.0	133	



Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report Result	Laboratory Control Spike (LCS) Report				
					Spike Concentration	Spike Recovery (%)		Acceptable Limits (%)	
						LCS	Low	High	High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4250189) - continued									
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	105	72.0	129	
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	88.2	69.0	133	
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	96.9	64.0	136	
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	97.0	69.0	135	
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	87.6	66.0	139	
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	87.8	69.0	133	
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4250189)									
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	90.4	67.0	137	
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	101	70.0	130	
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	94.0	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	92.0	70.0	130	
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	103	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	93.7	63.0	144	
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	105	61.0	139	
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4250189)									
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00117 mg/kg	87.5	62.0	145	
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00119 mg/kg	87.4	64.0	140	
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.0012 mg/kg	96.9	65.0	137	
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00121 mg/kg	91.2	70.0	130	
EP231P: PFAS Sums (QCLot: 4250189)									
EP231X: Sum of PFAS	----	0.0002	mg/kg	<0.0002	----	----	----	----	
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.0002	mg/kg	<0.0002	----	----	----	----	
EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	----	----	----	----	

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report Result	Laboratory Control Spike (LCS) Report				
					Spike Concentration	Spike Recovery (%)		Acceptable Limits (%)	
						LCS	Low	High	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4255109)									
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	99.4	72.0	130	
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	90.4	71.0	127	
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	90.1	68.0	131	
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	90.8	69.0	134	
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	89.9	65.0	140	
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	91.7	53.0	142	



Sub-Matrix: WATER

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
				Result	Spike	Spike Recovery (%)	Acceptable Limits (%)	
					Concentration	LCS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4255148)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	89.2	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	118	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	102	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	84.1	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	82.7	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	75.7	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4255408)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	95.2	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	110	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	93.1	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	83.1	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	80.9	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	76.0	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4255109)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	93.9	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	98.2	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	99.0	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	96.9	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	98.8	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	100	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	90.7	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	87.6	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	96.0	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	97.1	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	97.9	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4255148)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	92.5	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	103	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	94.8	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	101	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	98.5	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	120	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	98.2	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	103	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	102	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	90.2	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	103	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4255408)								



Sub-Matrix: WATER

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report				
				Result	Spike	Spike Recovery (%)		Acceptable Limits (%)	
					Concentration	LCS	Low	High	
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4255408) - continued									
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	94.4	73.0	129	
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	102	72.0	129	
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	96.9	72.0	129	
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	106	72.0	130	
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	100	71.0	133	
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	118	69.0	130	
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	98.5	71.0	129	
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	107	69.0	133	
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	104	72.0	134	
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	98.7	65.0	144	
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	110	71.0	132	
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4255109)									
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	92.4	67.0	137	
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	107	68.0	141	
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	92.4	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	89.0	70.0	130	
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	105	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	112	65.0	136	
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	92.9	61.0	135	
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4255148)									
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	93.9	67.0	137	
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	137	68.0	141	
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	126	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	115	70.0	130	
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	111	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	94.1	65.0	136	
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	115	61.0	135	
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4255408)									
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	99.7	67.0	137	
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	136	68.0	141	
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	106	70.0	130	



Sub-Matrix: WATER

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
				Result	Spike	Spike Recovery (%)	Acceptable Limits (%)	
					Concentration	LCS	Low	High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4255408) - continued								
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	126	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	126	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	86.2	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	116	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4255109)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	93.4	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	105	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	118	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.242 µg/L	116	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4255148)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	104	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	107	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	111	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.242 µg/L	74.8	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4255408)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	92.4	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	99.1	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	118	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.242 µg/L	83.8	70.0	130
EP231P: PFAS Sums (QCLot: 4255109)								
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----
EP231P: PFAS Sums (QCLot: 4255148)								
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----
EP231P: PFAS Sums (QCLot: 4255408)								
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----



Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report			
				Spike Concentration	SpikeRecovery(%) MS	Acceptable Limits (%)	
						Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4251889)							
EM2204774-002	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	106	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	94.6	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	111	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	105	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	98.0	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	101	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	89.8	80.0	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4251888)							
EM2204774-002	Anonymous	EG035T: Mercury	7439-97-6	0.5 mg/kg	110	76.0	116
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4251935)							
EM2205097-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	79.2	58.0	114
EM2205097-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	87.5	58.0	114
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4252434)							
EM2205127-047	Anonymous	EK026SF: Total Cyanide	57-12-5	20 mg/kg	101	70.0	130
EK040T: Fluoride Total (QCLot: 4251947)							
EM2205138-002	SX_OB_20220322_07_58_SS_Duplicate_ALS	EK040T: Fluoride	16984-48-8	400 mg/kg	113	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4250065)							
EM2205040-006	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	1 mg/kg	66.6	59.6	152
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4247569)							
EM2205138-002	SX_OB_20220322_07_58_SS_Duplicate_ALS	EP074-UT: Benzene	71-43-2	2 mg/kg	88.6	53.7	130
		EP074-UT: Toluene	108-88-3	2 mg/kg	90.4	55.1	124
EP074I: Volatile Halogenated Compounds (QCLot: 4247569)							
EM2205138-002	SX_OB_20220322_07_58_SS_Duplicate_ALS	EP074-UT: 1,1-Dichloroethene	75-35-4	2 mg/kg	89.2	38.4	145
		EP074-UT: Trichloroethene	79-01-6	2 mg/kg	88.8	48.1	128
		EP074-UT: Chlorobenzene	108-90-7	2 mg/kg	87.4	55.5	122
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4250064)							
EM2205040-004	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	3 mg/kg	94.5	44.0	143
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	3 mg/kg	103	41.5	139
		EP075-EM: Pentachlorophenol	87-86-5	3 mg/kg	39.5	10.0	144
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4250064)							
EM2205040-004	Anonymous	EP075-EM: Phenol	108-95-2	3 mg/kg	87.3	44.2	134



Sub-Matrix: SOIL

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4250064) - continued							
EM2205040-004	Anonymous	EP075-EM: 2-Nitrophenol	88-75-5	3 mg/kg	70.5	34.2	129
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4250064)							
EM2205040-004	Anonymous	EP075-EM: Acenaphthene	83-32-9	3 mg/kg	# Not Determined	42.6	138
		EP075-EM: Pyrene	129-00-0	3 mg/kg	# Not Determined	37.8	152
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4247569)							
EM2205138-002	SX_OB_20220322_07_58_SS_Duplicate_ALS	EP074-UT: C6 - C9 Fraction	----	28 mg/kg	72.9	42.3	111
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4250066)							
EM2205040-005	Anonymous	EP071-EM: C10 - C14 Fraction	----	760 mg/kg	91.2	71.3	126
		EP071-EM: C15 - C28 Fraction	----	3270 mg/kg	89.5	75.1	123
		EP071-EM: C29 - C36 Fraction	----	1550 mg/kg	86.7	78.1	120
		EP071-EM: C10 - C36 Fraction (sum)	----	5580 mg/kg	90.4	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4247569)							
EM2205138-002	SX_OB_20220322_07_58_SS_Duplicate_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	33 mg/kg	71.9	39.9	109
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4250066)							
EM2205040-005	Anonymous	EP071-EM: >C10 - C16 Fraction	----	1110 mg/kg	88.4	71.5	130
		EP071-EM: >C16 - C34 Fraction	----	4180 mg/kg	87.0	76.9	119
		EP071-EM: >C34 - C40 Fraction	----	290 mg/kg	88.6	65.3	139
		EP071-EM: >C10 - C40 Fraction (sum)	----	5580 mg/kg	88.9	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4250189)							
EM2205036-001	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00111 mg/kg	106	72.0	128
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00118 mg/kg	93.5	73.0	123
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00114 mg/kg	75.6	67.0	130
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00119 mg/kg	86.6	70.0	132
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00116 mg/kg	78.0	68.0	136
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00121 mg/kg	77.4	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4250189)							
EM2205036-001	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	91.2	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	91.0	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	96.3	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	103	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	96.9	69.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	110	72.0	129
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	86.5	69.0	133
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	90.1	64.0	136
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	97.0	69.0	135



Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4250189) - continued							
EM2205036-001	Anonymous	EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.00125 mg/kg	83.8	66.0	139
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	93.4	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4250189)							
EM2205036-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	93.2	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	101	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	106	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	97.4	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	117	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	101	63.0	144
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	112	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4250189)							
EM2205036-001	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00117 mg/kg	90.6	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00119 mg/kg	92.6	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0012 mg/kg	104	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00121 mg/kg	91.3	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4255109)							
EM2204780-004	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	102	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	86.9	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	87.0	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	92.5	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	91.5	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	93.1	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4255148)							
EM2204780-010	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	106	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	99.1	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	87.5	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	113	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	101	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	70.3	53.0	142



Sub-Matrix: WATER

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4255109)							
EM2204780-004	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	97.2	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	104	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	101	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	101	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	103	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	103	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	96.3	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	93.1	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	95.4	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	93.2	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	102	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4255148)							
EM2204780-010	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	81.9	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	108	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	109	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	90.7	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	89.0	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	94.8	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	88.3	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	77.4	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	107	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	# 63.4	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	127	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4255109)							
EM2204780-004	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	95.8	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	125	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	119	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	92.1	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	107	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	108	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	93.0	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4255148)							
EM2204780-010	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	88.2	67.0	137



Sub-Matrix: WATER

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4255148) - continued							
EM2204780-010	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	72.7	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	# 134	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	72.8	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	108	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	69.6	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	131	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4255109)							
EM2204780-004	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	100	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	99.4	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	112	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	106	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4255148)							
EM2204780-010	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	81.2	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	98.9	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	95.4	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	91.4	70.0	130

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: EM2205138	Page	: 1 of 13
Client	: AGON ENVIRONMENTAL PTY LTD	Laboratory	: Environmental Division Melbourne
Contact	: DAVID LAWSON	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 23-Mar-2022
Site	: 20220323044928-ALS-12	Issue Date	: 30-Mar-2022
Sampler	: HK - EP Risk	No. of samples received	: 18
Order number	: ----	No. of samples analysed	: 18

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO** Method Blank value outliers occur.
- **NO** Duplicate outliers occur.
- **NO** Laboratory Control outliers occur.
- Matrix Spike outliers exist - please see following pages for full details.
- For all regular sample matrices, **NO** surrogate recovery outliers occur.

Outliers : Analysis Holding Time Compliance

- **NO** Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- Quality Control Sample Frequency Outliers exist - please see following pages for full details.



Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
EP075B: Polynuclear Aromatic Hydrocarbons	EM2205040--004	Anonymous	Pyrene	129-00-0	Not Determined	----	MS recovery not determined, background level greater than or equal to 4x spike level.

Matrix: **WATER**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
EP231B: Perfluoroalkyl Carboxylic Acids	EM2204780--010	Anonymous	Perfluorotridecanoic acid (PFTrDA)	72629-94-8	63.4 %	65.0-144%	Recovery less than lower data quality objective
EP231C: Perfluoroalkyl Sulfonamides	EM2204780--010	Anonymous	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	134 %	70.0-130%	Recovery greater than upper data quality objective

Outliers : Frequency of Quality Control Samples

Matrix: **WATER**

Quality Control Sample Type	Count		Rate (%)		Quality Control Specification
	QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)					
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	4	42	9.52	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)					
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	2	42	4.76	5.00	NEPM 2013 B3 & ALS QC Standard

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for VOC in soils vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EA001: pH in soil using 0.01M CaCl extract								
Soil Glass Jar - Unpreserved (EA001)								
SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	29-Mar-2022	29-Mar-2022	✓	29-Mar-2022	29-Mar-2022	✓



Matrix: SOIL

Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EA055: Moisture Content (Dried @ 105-110°C)								
Soil Glass Jar - Unpreserved (EA055)								
SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	----	----	----	28-Mar-2022	05-Apr-2022	✓
EG005(ED093)T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved (EG005T)								
SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	29-Mar-2022	18-Sep-2022	✓	29-Mar-2022	18-Sep-2022	✓
EG035T: Total Recoverable Mercury by FIMS								
Soil Glass Jar - Unpreserved (EG035T)								
SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	29-Mar-2022	19-Apr-2022	✓	29-Mar-2022	19-Apr-2022	✓
EG048: Hexavalent Chromium (Alkaline Digest)								
Soil Glass Jar - Unpreserved (EG048G)								
SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	29-Mar-2022	19-Apr-2022	✓	30-Mar-2022	05-Apr-2022	✓
EK026SF: Total CN by Segmented Flow Analyser								
Soil Glass Jar - Unpreserved (EK026SF)								
SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	29-Mar-2022	05-Apr-2022	✓	30-Mar-2022	12-Apr-2022	✓
EK040T: Fluoride Total								
Soil Glass Jar - Unpreserved (EK040T)								
SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	29-Mar-2022	19-Apr-2022	✓	30-Mar-2022	19-Apr-2022	✓
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P)								
SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	25-Mar-2022	18-Sep-2022	✓	----	----	----



Matrix: SOIL

Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P)								
SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	25-Mar-2022	18-Sep-2022	✓	----	----	----
EP066: Polychlorinated Biphenyls (PCB)								
Soil Glass Jar - Unpreserved (EP066-EM)								
SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	28-Mar-2022	05-Apr-2022	✓	29-Mar-2022	07-May-2022	✓
EP074A: Monocyclic Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved (EP074-UT)								
SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	24-Mar-2022	29-Mar-2022	✓	24-Mar-2022	29-Mar-2022	✓
EP074H: Naphthalene								
Soil Glass Jar - Unpreserved (EP074-UT)								
SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	24-Mar-2022	29-Mar-2022	✓	24-Mar-2022	29-Mar-2022	✓
EP074I: Volatile Halogenated Compounds								
Soil Glass Jar - Unpreserved (EP074-UT)								
SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	24-Mar-2022	29-Mar-2022	✓	24-Mar-2022	29-Mar-2022	✓
EP075A: Phenolic Compounds (Halogenated)								
Soil Glass Jar - Unpreserved (EP075-EM)								
SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	28-Mar-2022	05-Apr-2022	✓	29-Mar-2022	07-May-2022	✓
EP075A: Phenolic Compounds (Non-halogenated)								
Soil Glass Jar - Unpreserved (EP075-EM)								
SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	28-Mar-2022	05-Apr-2022	✓	29-Mar-2022	07-May-2022	✓



Matrix: SOIL

Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EP075B: Polynuclear Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved (EP075-EM)								
SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	28-Mar-2022	05-Apr-2022	✓	29-Mar-2022	07-May-2022	✓
EP075I: Organochlorine Pesticides								
Soil Glass Jar - Unpreserved (EP075-EM)								
SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	28-Mar-2022	05-Apr-2022	✓	29-Mar-2022	07-May-2022	✓
EP080/071: Total Petroleum Hydrocarbons								
Soil Glass Jar - Unpreserved (EP074-UT)								
SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	24-Mar-2022	29-Mar-2022	✓	24-Mar-2022	29-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM)								
SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	28-Mar-2022	05-Apr-2022	✓	29-Mar-2022	07-May-2022	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
Soil Glass Jar - Unpreserved (EP074-UT)								
SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	24-Mar-2022	29-Mar-2022	✓	24-Mar-2022	29-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM)								
SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	28-Mar-2022	05-Apr-2022	✓	29-Mar-2022	07-May-2022	✓
EP231A: Perfluoroalkyl Sulfonic Acids								
HDPE Soil Jar (EP231X)								
SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	25-Mar-2022	18-Sep-2022	✓	29-Mar-2022	04-May-2022	✓



Matrix: **SOIL**

Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EP231B: Perfluoroalkyl Carboxylic Acids								
HDPE Soil Jar (EP231X) SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	25-Mar-2022	18-Sep-2022	✓	29-Mar-2022	04-May-2022	✓
EP231C: Perfluoroalkyl Sulfonamides								
HDPE Soil Jar (EP231X) SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	25-Mar-2022	18-Sep-2022	✓	29-Mar-2022	04-May-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
HDPE Soil Jar (EP231X) SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	25-Mar-2022	18-Sep-2022	✓	29-Mar-2022	04-May-2022	✓
EP231P: PFAS Sums								
HDPE Soil Jar (EP231X) SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	22-Mar-2022	25-Mar-2022	18-Sep-2022	✓	29-Mar-2022	04-May-2022	✓

Matrix: **WATER**

Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EP231A: Perfluoroalkyl Sulfonic Acids								
HDPE (no PTFE) (EP231X) SX_OB_20220322_08_17_SR_Rinsate_ALS,	SX_OB_20220322_08_19_SB_Blank_ALS	22-Mar-2022	29-Mar-2022	18-Sep-2022	✓	29-Mar-2022	18-Sep-2022	✓
HDPE (no PTFE) (EP231X) SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS, SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS, SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	25-Mar-2022	29-Mar-2022	21-Sep-2022	✓	29-Mar-2022	21-Sep-2022	✓



Matrix: WATER

Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis				
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation		
EP231B: Perfluoroalkyl Carboxylic Acids									
HDPE (no PTFE) (EP231X) SX_OB_20220322_08_17_SR_Rinsate_ALS,	SX_OB_20220322_08_19_SB_Blank_ALS	22-Mar-2022	29-Mar-2022	18-Sep-2022	✓	29-Mar-2022	18-Sep-2022	✓	
HDPE (no PTFE) (EP231X) SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS, SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS, SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	25-Mar-2022	29-Mar-2022	21-Sep-2022	✓	29-Mar-2022	21-Sep-2022	✓	
EP231C: Perfluoroalkyl Sulfonamides									
HDPE (no PTFE) (EP231X) SX_OB_20220322_08_17_SR_Rinsate_ALS,	SX_OB_20220322_08_19_SB_Blank_ALS	22-Mar-2022	29-Mar-2022	18-Sep-2022	✓	29-Mar-2022	18-Sep-2022	✓	
HDPE (no PTFE) (EP231X) SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS, SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS, SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	25-Mar-2022	29-Mar-2022	21-Sep-2022	✓	29-Mar-2022	21-Sep-2022	✓	
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
HDPE (no PTFE) (EP231X) SX_OB_20220322_08_17_SR_Rinsate_ALS,	SX_OB_20220322_08_19_SB_Blank_ALS	22-Mar-2022	29-Mar-2022	18-Sep-2022	✓	29-Mar-2022	18-Sep-2022	✓	
HDPE (no PTFE) (EP231X) SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS, SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS, SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	25-Mar-2022	29-Mar-2022	21-Sep-2022	✓	29-Mar-2022	21-Sep-2022	✓	



Matrix: **WATER** Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EP231P: PFAS Sums								
HDPE (no PTFE) (EP231X)								
SX_OB_20220322_08_17_SR_Rinsate_ALS, SX_OB_20220322_11_53_SS_Primary_ALS,	SX_OB_20220322_08_19_SB_Blank_ALS	22-Mar-2022	29-Mar-2022	18-Sep-2022	✓	29-Mar-2022	18-Sep-2022	✓
HDPE (no PTFE) (EP231X)								
SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS, SX_OB_20220322_07_57_SS_Primary_ALS, SX_OB_20220322_11_53_SS_Primary_ALS, SX_OB_20220322_16_02_SS_Primary_ALS, SX_OB_20220323_00_05_SS_Primary_ALS,	SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS, SX_OB_20220322_07_58_SS_Duplicate_ALS, SX_OB_20220322_15_56_SS_Triplicate_ALS, SX_OB_20220322_20_15_SS_Primary_ALS, SX_OB_20220323_04_04_SS_Primary_ALS	25-Mar-2022	29-Mar-2022	21-Sep-2022	✓	29-Mar-2022	21-Sep-2022	✓



Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: * = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type	Method	Count		Rate (%)			Quality Control Specification
		QC	Reaular	Actual	Expected	Evaluation	
Analytical Methods							
Laboratory Duplicates (DUP)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	19	10.53	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	2	19	10.53	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	3	19	15.79	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	20	15.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	2	19	10.53	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	12.50	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	19	10.53	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	2	24	8.33	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard



Matrix: **SOIL** Evaluation: * = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type	Method	Count		Rate (%)			Quality Control Specification
		QC	Reaular	Actual	Expected	Evaluation	
Analytical Methods							
Matrix Spikes (MS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	19	10.53	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER** Evaluation: * = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type	Method	Count		Rate (%)			Quality Control Specification
		QC	Reaular	Actual	Expected	Evaluation	
Analytical Methods							
Laboratory Duplicates (DUP)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	4	42	9.52	10.00	*	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	3	42	7.14	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	3	42	7.14	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	42	4.76	5.00	*	NEPM 2013 B3 & ALS QC Standard



Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
pH in soil using a 0.01M CaCl ₂ extract	EA001	SOIL	In house: Referenced to Rayment and Lyons 4B3 (mod.) or 4B4 (mod.) 10 g of soil is mixed with 50 mL of 0.01M CaCl ₂ and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl ₂) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl ₂ which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	SOIL	In house: Referenced to USEPA SW846, Method 3060. Hexavalent chromium is extracted by alkaline digestion. The digest is determined by photometrically by automatic discrete analyser, following pH adjustment. The instrument uses colour development using dephenylcarbazide. Each run of samples is measured against a five-point calibration curve. This method is compliant with NEPM Schedule B(3)
Total Cyanide by Segmented Flow Analyser	EK026SF	SOIL	In house: Referenced to APHA 4500-CN C / ASTM D7511 / ISO 14403. Caustic leachates of soil samples are introduced into an automated segmented flow analyser. Complex bound cyanide is decomposed in a continuously flowing stream, at a pH of 3.8, by the effect of UV light. A UV-B lamp (312 nm) and a decomposition spiral of borosilicate glass are used to filter out UV light with a wavelength of less than 290 nm thus preventing the conversion of thiocyanate into cyanide. The hydrogen cyanide present at a pH of 3.8 is separated by gas dialysis. The hydrogen cyanide is then determined photometrically, based on the reaction of cyanide with chloramine-T to form cyanogen chloride. This then reacts with 4-pyridine carboxylic acid and 1,3-dimethylbarbituric acid to give a red colour which is measured at 600 nm. This method is compliant with NEPM Schedule B(3).
Total Fluoride	EK040T	SOIL	(In-house) Total fluoride is determined by ion specific electrode (ISE) in a solution obtained after a Sodium Carbonate / Potassium Carbonate fusion dissolution.
PCB - VIC EPA 448.3 Screen	EP066-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071-EM	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40.
Volatile Organic Compounds - Ultra-trace	EP074-UT	SOIL	In house: Referenced to USEPA SW 846 - 8260 Extracts are analysed by Purge and Trap, Capillary GC/MS in partial SIM/Scan mode. Quantification is by comparison against an established multi-point calibration curves. This method is compliant with NEPM Schedule B(3).





Analytical Methods	Method	Matrix	Method Descriptions
Volatile Organic Compounds - Ultra-trace - Summations	EP074-UT-SUM	SOIL	Summation of MAHs and VHCs
Semivolatile Organic Compounds - Waste Classification	EP075-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
SVOC - Waste Classification (Sums)	EP075-EM-SUM	SOIL	Summations for EP075 (EM variation)
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	SOIL	In-house: Analysis of fresh and saline waters by Solid Phase Extraction (SPE) followed by LC-Electrospray-MS-MS, Negative Mode using MRM and internal standard quantitation. Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures and data quality objectives conform to US DoD QSM 5.3, table B-15 requirements.
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	WATER	In-house: Analysis of fresh and saline waters by Solid Phase Extraction (SPE) followed by LC-Electrospray-MS-MS, Negative Mode using MRM and internal standard quantitation. Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures and data quality objectives conform to US DoD QSM 5.3, table B-15 requirements.

Preparation Methods	Method	Matrix	Method Descriptions
NaOH leach for CN in Soils	CN-PR	SOIL	In house: APHA 4500 CN. Samples are extracted by end-over-end tumbling with NaOH.
pH in soil using a 0.01M CaCl ₂ extract	EA001-PR	SOIL	In house: Referenced to Rayment and Lyons 4B1, 10 g of soil is mixed with 50 mL of 0.01M CaCl ₂ and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
Alkaline digestion for Hexavalent Chromium	EG048PR	SOIL	In house: Referenced to USEPA SW846, Method 3060A.
Total Fluoride	EK040T-PR	SOIL	In house: Samples are fused with Sodium Carbonate / Potassium Carbonate flux.
ASLP for Non & Semivolatile Analytes - Plastic Leaching Vessel	EN60a-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates.
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils - Ultra-trace.	ORG16-UT	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids - VIC EPA Screen	ORG17-EM	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na ₂ SO ₄ and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.



<i>Preparation Methods</i>	<i>Method</i>	<i>Matrix</i>	<i>Method Descriptions</i>
QuEChERS Extraction of Solids	ORG71	SOIL	In house: Sequential extractions with Acetonitrile/Methanol by shaking. Extraction efficiency aided by the addition of salts under acidic conditions. Where relevant, interferences from co-extracted organics are removed with dispersive clean-up media (dSPE). The extract is either diluted or concentrated and exchanged into the analytical solvent.
Solid Phase Extraction (SPE) for PFAS in water	ORG72	SOIL	In-house: Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures conform to US DoD QSM 5.3, table B-15 requirements.
Solid Phase Extraction (SPE) for PFAS in water	ORG72	WATER	In-house: Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures conform to US DoD QSM 5.3, table B-15 requirements.

CHAIN OF CUSTODY DOCUMENTATION							 Australian Laboratory Services Pty Ltd						
CLIENT: Agon Environmental				SAMPLER: Will O'Haire Agon									
ADDRESS / OFFICE: Melbourne				MOBILE 1: +61 400 826 907 (Craig Trimbur)									
PROJECT MANAGER (PM): Craig Trimbur				MOBILE 2: +61 490 411 004 (David Lawson)									
PROJECT ID: JC0927				EMAIL REPORT TO: Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au motherhublabresults1@wgtp.com.au									
SITE: 20220406153550-ALS-8 P.O. NO.:				EMAIL INVOICE TO: (if different to report) Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au									
RESULTS REQUIRED (Date): 2 days QUOTE NO.: ME-150-19 WGTP				ANALYSIS REQUIRED including SUITES (note - suite codes must be listed to attract suite prices)									
FOR LABORATORY USE ONLY COOLER SEAL (circle appropriate) Intact: Yes No N/A SAMPLE TEMPERATURE CHILLED: Yes No		COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:						Notes:					
SAMPLE INFORMATION (note: S = Soil, W=Water)		CONTAINER INFORMATION						<h1 style="text-align: center;">URGENT</h1> <p style="text-align: center;">Environmental Division Melbourne Work Order Reference EM2206218</p>  <p style="text-align: center;">Telephone : + 61-3-8549 9600</p>					
ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles	Spill Sample Prep			P16 plus Cr	PFAS 28 Extended suite	ASLP PFAS - Extended Suite (Lab to determine pH)	Dil Leachate PFAS - Extended Suite
1	SX_OB_20220406_13_42_SS_Triplicate_ALS	S	6/04/2022		Bucket	1	x			x	x	x	x
2	SX_OB_20220406_13_44_SS_Primary_ALS	S	6/04/2022		Bucket	1	x			x	x	x	x
3	SX_OB_20220406_13_46_SS_Primary_ALS	S	6/04/2022		Bucket	1	x			x	x	x	x
4	SX_OB_20220406_13_47_SS_Primary_ALS	S	6/04/2022		Bucket	1	x			x	x	x	x
5	SX_OB_20220406_13_49_SS_Primary_ALS	S	6/04/2022		Bucket	1	x			x	x	x	x
6	SX_OB_20220406_13_51_SS_Primary_ALS	S	6/04/2022		Bucket	1	x			x	x	x	x
7	SX_OB_20220406_13_52_SS_Primary_ALS	S	6/04/2022		Bucket	1	x			x	x	x	x
8	SX_OB_20220406_13_53_SS_Duplicate_ALS	S	6/04/2022		Bucket	1	x			x	x	x	x
9	SX_OB_20220406_14_00_SR_Rinsate_ALS	W	6/04/2022		Bucket	1			X				
10	SX_OB_20220406_14_01_S8_Blank_ALS	W	6/04/2022		Bucket	1			X				
RELINQUISHED BY:				RECEIVED BY:				METHOD OF SHIPMENT:					
Name: DAILE BARNETT		Date: 06/04/2022		Name: Andrew		Date: 6-4		Con' Note No:					
Of: EP RISK		Time: PM		Of: ALS		Time: 1641							
Name:		Date:		Name:		Date:		Transport Co:					
Of:		Time:		Of:		Time:							

CERTIFICATE OF ANALYSIS

Work Order	: EM2206218	Page	: 1 of 29
Client	: AGON ENVIRONMENTAL PTY LTD	Laboratory	: Environmental Division Melbourne
Contact	: DAVID LAWSON	Contact	: Josh Alexander
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +61-3-8549 9600
Project	: JC0927	Date Samples Received	: 06-Apr-2022 16:41
Order number	:	Date Analysis Commenced	: 06-Apr-2022
C-O-C number	: 20220406153550-ALS-8	Issue Date	: 08-Apr-2022 17:00
Sampler	: Will O'Haire		
Site	: 20220406153550-ALS-8		
Quote number	: EN/150/19 -WGTP -Bulk Sample Quote		
No. of samples received	: 18		
No. of samples analysed	: 18		



This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Organics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC



General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a,h)anthracene (1.0), Benzo(g,h,i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP231X - Per- and Polyfluoroalkyl Substances (PFAS): Samples received in 20ml or 125ml bottles have been tested in accordance with the QSM5.3 compliant, NATA accredited method. 60mL or 250mL bottles have been tested to the legacy QSM 5.1 aligned, NATA accredited method.
- EP074-UT: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074-WF: Where reported, Sum of trichlorobenzenes is the sum of the reported concentrations of 1,2,3-Trichlorobenzene and 1,2,4-Trichlorobenzene, and 1,3,5-Trichlorobenzene at or above the LOR.
- EP231: Stable isotope enriched internal standards are added to samples prior to extraction. Target compounds have a direct analogous internal standard with the exception of PFPeS, PFHpA, PFDS, PFTrDA and 10:2 FTS. These compounds use an internal standard that is chemically related and has a retention time close to that of the target compound. The DQO for internal standard response is 50-150% of that established at initial calibration. PFOS is quantified using a certified, traceable standard consisting of linear and branched PFOS isomers. These practices are in line with recommendations in the National Environmental Management Plan for PFAS (Australian HEPA) and also conform to QSM 5.3 (US DoD) requirements.
- EN60: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.
- EN60-DI: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.



Analytical Results

Sub-Matrix: ASLP LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220406_13_42_SS_Triplicate_ALS	SX_OB_20220406_13_44_SS_Primary_ALS	SX_OB_20220406_13_46_SS_Primary_ALS	SX_OB_20220406_13_47_SS_Primary_ALS	SX_OB_20220406_13_49_SS_Primary_ALS
Sampling date / time				06-Apr-2022 13:42	06-Apr-2022 13:44	06-Apr-2022 13:46	06-Apr-2022 13:47	06-Apr-2022 13:49
Compound	CAS Number	LOR	Unit	EM2206218-001	EM2206218-002	EM2206218-003	EM2206218-004	EM2206218-005
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05



Analytical Results

Sub-Matrix: ASLP LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220406_13_42_SS_Triplicate_ALS	SX_OB_20220406_13_44_SS_Primary_ALS	SX_OB_20220406_13_46_SS_Primary_ALS	SX_OB_20220406_13_47_SS_Primary_ALS	SX_OB_20220406_13_49_SS_Primary_ALS
Sampling date / time				06-Apr-2022 13:42	06-Apr-2022 13:44	06-Apr-2022 13:46	06-Apr-2022 13:47	06-Apr-2022 13:49
Compound	CAS Number	LOR	Unit	EM2206218-001	EM2206218-002	EM2206218-003	EM2206218-004	EM2206218-005
				Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231P: PFAS Sums								
Sum of PFAS	----	0.10	µg/L	<0.10	<0.10	<0.10	<0.10	<0.10
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFAS (WA DER List)	----	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	95.4	98.0	107	103	104
13C8-PFOA	----	0.02	%	103	102	104	104	103



Analytical Results

Sub-Matrix: ASLP LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220406_13_51_SS_Primary_ALS	SX_OB_20220406_13_52_SS_Primary_ALS	SX_OB_20220406_13_53_SS_Duplicate_ALS	----	----
Sampling date / time				06-Apr-2022 13:51	06-Apr-2022 13:52	06-Apr-2022 13:53	----	----
Compound	CAS Number	LOR	Unit	EM2206218-006	EM2206218-007	EM2206218-008	-----	-----
				Result	Result	Result	----	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	<0.02	----	----
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	<0.1	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	<0.05	----	----
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	<0.05	----	----



Analytical Results

Sub-Matrix: ASLP LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220406_13_51_SS_Primary_ALS	SX_OB_20220406_13_52_SS_Primary_ALS	SX_OB_20220406_13_53_SS_Duplicate_ALS	----	----
Sampling date / time				06-Apr-2022 13:51	06-Apr-2022 13:52	06-Apr-2022 13:53	----	----
Compound	CAS Number	LOR	Unit	EM2206218-006	EM2206218-007	EM2206218-008	-----	-----
				Result	Result	Result	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	<0.05	<0.05	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	<0.05	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	<0.05	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	<0.05	----	----
EP231P: PFAS Sums								
Sum of PFAS	----	0.10	µg/L	<0.10	<0.10	<0.10	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	----	----
Sum of PFAS (WA DER List)	----	0.05	µg/L	<0.05	<0.05	<0.05	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	96.6	102	89.6	----	----
13C8-PFOA	----	0.02	%	102	99.5	100	----	----



Analytical Results

Sub-Matrix: DI WATER LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220406_13_42_SS_Triplicate_ALS	SX_OB_20220406_13_44_SS_Primary_ALS	SX_OB_20220406_13_46_SS_Primary_ALS	SX_OB_20220406_13_47_SS_Primary_ALS	SX_OB_20220406_13_49_SS_Primary_ALS
Sampling date / time				06-Apr-2022 13:42	06-Apr-2022 13:44	06-Apr-2022 13:46	06-Apr-2022 13:47	06-Apr-2022 13:49
Compound	CAS Number	LOR	Unit	EM2206218-011	EM2206218-012	EM2206218-013	EM2206218-014	EM2206218-015
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05



Analytical Results

Sub-Matrix: DI WATER LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220406_13_42_SS_Triplicate_ALS	SX_OB_20220406_13_44_SS_Primary_ALS	SX_OB_20220406_13_46_SS_Primary_ALS	SX_OB_20220406_13_47_SS_Primary_ALS	SX_OB_20220406_13_49_SS_Primary_ALS
Sampling date / time				06-Apr-2022 13:42	06-Apr-2022 13:44	06-Apr-2022 13:46	06-Apr-2022 13:47	06-Apr-2022 13:49
Compound	CAS Number	LOR	Unit	EM2206218-011	EM2206218-012	EM2206218-013	EM2206218-014	EM2206218-015
				Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231P: PFAS Sums								
Sum of PFAS	----	0.10	µg/L	<0.10	<0.10	<0.10	<0.10	<0.10
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFAS (WA DER List)	----	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	98.4	94.0	107	95.1	101
13C8-PFOA	----	0.02	%	104	100	105	103	100



Analytical Results

Sub-Matrix: DI WATER LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220406_13_51_SS_Primary_ALS	SX_OB_20220406_13_52_SS_Primary_ALS	SX_OB_20220406_13_53_SS_Duplicate_ALS	----	----
Sampling date / time				06-Apr-2022 13:51	06-Apr-2022 13:52	06-Apr-2022 13:53	----	----
Compound	CAS Number	LOR	Unit	EM2206218-016	EM2206218-017	EM2206218-018	-----	-----
				Result	Result	Result	----	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	<0.02	----	----
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	<0.1	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	<0.05	----	----
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	<0.05	----	----



Analytical Results

Sub-Matrix: DI WATER LEACHATE
 (Matrix: WATER)

Sample ID

				SX_OB_20220406_13_51_SS_Primary_ALS	SX_OB_20220406_13_52_SS_Primary_ALS	SX_OB_20220406_13_53_SS_Duplicate_ALS	----	----
Sampling date / time				06-Apr-2022 13:51	06-Apr-2022 13:52	06-Apr-2022 13:53	----	----
Compound	CAS Number	LOR	Unit	EM2206218-016	EM2206218-017	EM2206218-018	-----	-----
				Result	Result	Result	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	<0.05	<0.05	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	<0.05	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	<0.05	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	<0.05	----	----
EP231P: PFAS Sums								
Sum of PFAS	----	0.10	µg/L	<0.10	<0.10	<0.10	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	----	----
Sum of PFAS (WA DER List)	----	0.05	µg/L	<0.05	<0.05	<0.05	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	105	103	93.5	----	----
13C8-PFOA	----	0.02	%	102	106	104	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220406_13_42_SS_Triplicate_ALS	SX_OB_20220406_13_44_SS_Primary_ALS	SX_OB_20220406_13_46_SS_Primary_ALS	SX_OB_20220406_13_47_SS_Primary_ALS	SX_OB_20220406_13_49_SS_Primary_ALS
Sampling date / time				06-Apr-2022 13:42	06-Apr-2022 13:44	06-Apr-2022 13:46	06-Apr-2022 13:47	06-Apr-2022 13:49
Compound	CAS Number	LOR	Unit	EM2206218-001	EM2206218-002	EM2206218-003	EM2206218-004	EM2206218-005
				Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl2)	----	0.1	pH Unit	8.2	8.1	8.0	8.1	7.9
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	26.7	26.8	25.2	26.8	23.2
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	23	26	22	26	23
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	5	mg/kg	92	101	102	95	88
Copper	7440-50-8	5	mg/kg	53	56	50	54	62
Lead	7439-92-1	5	mg/kg	<5	<5	<5	<5	<5
Molybdenum	7439-98-7	5	mg/kg	<5	<5	<5	<5	<5
Nickel	7440-02-0	5	mg/kg	170	166	155	168	190
Selenium	7782-49-2	5	mg/kg	<5	<5	<5	<5	<5
Silver	7440-22-4	2	mg/kg	<2	<2	<2	<2	<2
Tin	7440-31-5	10	mg/kg	<10	<10	<10	<10	<10
Zinc	7440-66-6	5	mg/kg	98	93	88	96	97
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	1.3
EK026SF: Total CN by Segmented Flow Analyser								
Total Cyanide	57-12-5	5	mg/kg	<5	<5	<5	<5	<5
EK040T: Fluoride Total								
Fluoride	16984-48-8	100	mg/kg	120	180	160	130	160
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	9.7	9.5	9.8	9.6	9.7
After HCl pH	----	0.1	pH Unit	1.5	1.5	1.4	1.5	1.4
Extraction Fluid pH	----	0.1	pH Unit	5.0	5.0	5.0	5.0	5.0
Final pH	----	0.1	pH Unit	5.1	5.1	5.0	5.1	5.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220406_13_42_SS_Triplicate_ALS	SX_OB_20220406_13_44_SS_Primary_ALS	SX_OB_20220406_13_46_SS_Primary_ALS	SX_OB_20220406_13_47_SS_Primary_ALS	SX_OB_20220406_13_49_SS_Primary_ALS
Sampling date / time				06-Apr-2022 13:42	06-Apr-2022 13:44	06-Apr-2022 13:46	06-Apr-2022 13:47	06-Apr-2022 13:49
Compound	CAS Number	LOR	Unit	EM2206218-001	EM2206218-002	EM2206218-003	EM2206218-004	EM2206218-005
				Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons - Continued								
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of monocyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP074H: Naphthalene								
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1
EP074I: Volatile Halogenated Compounds								
Vinyl chloride	75-01-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethene	75-35-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Methylene chloride	75-09-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-Dichloroethene	156-60-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
cis-1,2-Dichloroethene	156-59-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Chloroform	67-66-3	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1-Trichloroethane	71-55-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	56-23-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichloroethane	107-06-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethene	79-01-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	79-00-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethene	127-18-4	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1,2-Tetrachloroethane	630-20-6	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2,2-Tetrachloroethane	79-34-5	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Hexachlorobutadiene	87-68-3	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
Chlorobenzene	108-90-7	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,4-Dichlorobenzene	106-46-7	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichlorobenzene	95-50-1	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
1,2,4-Trichlorobenzene	120-82-1	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
^ Sum of volatile chlorinated hydrocarbons	----	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
^ Sum of other chlorinated hydrocarbons	----	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
EP075A: Phenolic Compounds (Halogenated)								



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220406_13_42_SS_Triplicate_ALS	SX_OB_20220406_13_44_SS_Primary_ALS	SX_OB_20220406_13_46_SS_Primary_ALS	SX_OB_20220406_13_47_SS_Primary_ALS	SX_OB_20220406_13_49_SS_Primary_ALS
Sampling date / time				06-Apr-2022 13:42	06-Apr-2022 13:44	06-Apr-2022 13:46	06-Apr-2022 13:47	06-Apr-2022 13:49
Compound	CAS Number	LOR	Unit	EM2206218-001	EM2206218-002	EM2206218-003	EM2206218-004	EM2206218-005
				Result	Result	Result	Result	Result
EP075A: Phenolic Compounds (Halogenated) - Continued								
2-Chlorophenol	95-57-8	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
2,4-Dichlorophenol	120-83-2	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
2,6-Dichlorophenol	87-65-0	0.50	mg/kg	<0.50	<0.50	<0.50	<0.50	<0.50
4-Chloro-3-methylphenol	59-50-7	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
2,4,5-Trichlorophenol	95-95-4	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
2,4,6-Trichlorophenol	88-06-2	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
2,3,5,6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Pentachlorophenol	87-86-5	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
^ Sum of Phenols (halogenated)	----	1.00	mg/kg	<1.00	<1.00	<1.00	<1.00	<1.00
EP075A: Phenolic Compounds (Non-halogenated)								
Phenol	108-95-2	1	mg/kg	<1	<1	<1	<1	<1
2-Methylphenol	95-48-7	1	mg/kg	<1	<1	<1	<1	<1
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	<1	<1	<1
2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	<1	<1	<1
2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	<1	<1	<1
2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	<5	<5	<5
4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	<5	<5	<5
2-Methyl-4,6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	<5	<5	<5
Dinoseb	88-85-7	20	mg/kg	<20	<20	<20	<20	<20
2-Cyclohexyl-4,6-Dinitrophenol	131-89-5	20	mg/kg	<20	<20	<20	<20	<20
^ Sum of Phenols (non-halogenated)	----	20	mg/kg	<20	<20	<20	<20	<20
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220406_13_42_SS_Triplicate_ALS	SX_OB_20220406_13_44_SS_Primary_ALS	SX_OB_20220406_13_46_SS_Primary_ALS	SX_OB_20220406_13_47_SS_Primary_ALS	SX_OB_20220406_13_49_SS_Primary_ALS
Sampling date / time				06-Apr-2022 13:42	06-Apr-2022 13:44	06-Apr-2022 13:46	06-Apr-2022 13:47	06-Apr-2022 13:49
Compound	CAS Number	LOR	Unit	EM2206218-001	EM2206218-002	EM2206218-003	EM2206218-004	EM2206218-005
				Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	0.6	0.6	0.6	0.6	0.6
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	1.2	1.2	1.2	1.2	1.2
EP075I: Organochlorine Pesticides								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
Endosulfan 1	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan 2	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of organochlorine pesticides	----	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220406_13_42_SS_Triplicate_ALS	SX_OB_20220406_13_44_SS_Primary_ALS	SX_OB_20220406_13_46_SS_Primary_ALS	SX_OB_20220406_13_47_SS_Primary_ALS	SX_OB_20220406_13_49_SS_Primary_ALS
Sampling date / time				06-Apr-2022 13:42	06-Apr-2022 13:44	06-Apr-2022 13:46	06-Apr-2022 13:47	06-Apr-2022 13:49
Compound	CAS Number	LOR	Unit	EM2206218-001	EM2206218-002	EM2206218-003	EM2206218-004	EM2206218-005
				Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued								
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.30	mg/kg	<0.30	<0.30	<0.30	<0.30	<0.30
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/5 0-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Chlordane	57-74-9	0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
^ Sum of other organochlorine pesticides	----	0.03	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	mg/kg	<20	<20	<20	<20	<20
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C6 - C10 Fraction	C6_C10	20	mg/kg	<20	<20	<20	<20	<20
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	mg/kg	<20	<20	<20	<20	<20
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorodecane sulfonic acid (PFDS)	335-77-3	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220406_13_42_SS_Triplicate_ALS	SX_OB_20220406_13_44_SS_Primary_ALS	SX_OB_20220406_13_46_SS_Primary_ALS	SX_OB_20220406_13_47_SS_Primary_ALS	SX_OB_20220406_13_49_SS_Primary_ALS
Sampling date / time				06-Apr-2022 13:42	06-Apr-2022 13:44	06-Apr-2022 13:46	06-Apr-2022 13:47	06-Apr-2022 13:49
Compound	CAS Number	LOR	Unit	EM2206218-001	EM2206218-002	EM2206218-003	EM2206218-004	EM2206218-005
				Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	5	µg/kg	<5	<5	<5	<5	<5
Perfluoropentanoic acid (PFPeA)	2706-90-3	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorohexanoic acid (PFHxA)	307-24-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoroheptanoic acid (PFHpA)	375-85-9	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorooctanoic acid (PFOA)	335-67-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorononanoic acid (PFNA)	375-95-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorodecanoic acid (PFDA)	335-76-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorododecanoic acid (PFDoDA)	307-55-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
EP231D: (n:2) Fluorotelomer Sulfonic Acids								



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220406_13_42_SS_Triplicate_ALS	SX_OB_20220406_13_44_SS_Primary_ALS	SX_OB_20220406_13_46_SS_Primary_ALS	SX_OB_20220406_13_47_SS_Primary_ALS	SX_OB_20220406_13_49_SS_Primary_ALS
Sampling date / time				06-Apr-2022 13:42	06-Apr-2022 13:44	06-Apr-2022 13:46	06-Apr-2022 13:47	06-Apr-2022 13:49
Compound	CAS Number	LOR	Unit	EM2206218-001	EM2206218-002	EM2206218-003	EM2206218-004	EM2206218-005
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
EP231P: PFAS Sums								
Sum of PFAS	----	50.0	µg/kg	<50.0	<50.0	<50.0	<50.0	<50.0
Sum of PFHxS and PFOS	355-46-4/1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Sum of PFAS (WA DER List)	----	10.0	µg/kg	<10.0	<10.0	<10.0	<10.0	<10.0
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	118	112	114	114	112
EP074S: VOC Surrogates (Ultra-Trace)								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	86.4	81.5	86.9	87.9	91.4
Toluene-D8	2037-26-5	0.1	%	78.8	75.0	81.6	83.0	85.4
4-Bromofluorobenzene	460-00-4	0.1	%	80.9	77.3	81.7	84.0	85.6
EP075S: Acid Extractable Surrogates (Waste Classification)								
Phenol-d6	13127-88-3	0.025	%	93.6	88.2	91.2	90.8	88.5
2-Chlorophenol-D4	93951-73-6	0.025	%	88.1	83.2	86.6	85.8	83.1
2,4,6-Tribromophenol	118-79-6	0.025	%	81.5	78.7	81.0	80.7	77.7
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)								
Nitrobenzene-D5	4165-60-0	0.025	%	90.0	83.4	86.9	85.6	84.8
1,2-Dichlorobenzene-D4	2199-69-1	0.025	%	87.7	82.5	84.8	84.5	83.0
2-Fluorobiphenyl	321-60-8	0.025	%	94.8	89.2	92.1	91.6	89.2
Anthracene-d10	1719-06-8	0.025	%	90.2	86.2	87.4	87.8	85.0
4-Terphenyl-d14	1718-51-0	0.025	%	98.7	93.6	93.6	95.0	91.6
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	99.4	99.8	104	109	101
13C8-PFOA	----	0.0002	%	107	105	104	104	104



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220406_13_51_SS_Primary_ALS	SX_OB_20220406_13_52_SS_Primary_ALS	SX_OB_20220406_13_53_SS_Duplicate_ALS	SX_OB_20220406_13_42_SS_Triplicate_ALS	SX_OB_20220406_13_44_SS_Primary_ALS
Sampling date / time				06-Apr-2022 13:51	06-Apr-2022 13:52	06-Apr-2022 13:53	06-Apr-2022 13:42	06-Apr-2022 13:44
Compound	CAS Number	LOR	Unit	EM2206218-006	EM2206218-007	EM2206218-008	EM2206218-011	EM2206218-012
				Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract								
pH (CaCl ₂)	----	0.1	pH Unit	7.8	7.8	7.9	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	27.9	27.2	27.0	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	20	25	23	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	----	----
Chromium	7440-47-3	5	mg/kg	102	104	94	----	----
Copper	7440-50-8	5	mg/kg	52	56	48	----	----
Lead	7439-92-1	5	mg/kg	<5	<5	<5	----	----
Molybdenum	7439-98-7	5	mg/kg	<5	<5	<5	----	----
Nickel	7440-02-0	5	mg/kg	168	205	164	----	----
Selenium	7782-49-2	5	mg/kg	<5	<5	<5	----	----
Silver	7440-22-4	2	mg/kg	<2	<2	<2	----	----
Tin	7440-31-5	10	mg/kg	<10	<10	<10	----	----
Zinc	7440-66-6	5	mg/kg	89	100	78	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	----	----
EG048: Hexavalent Chromium (Alkaline Digest)								
Hexavalent Chromium	18540-29-9	1.0	mg/kg	1.0	1.6	1.4	----	----
EK026SF: Total CN by Segmented Flow Analyser								
Total Cyanide	57-12-5	5	mg/kg	<5	<5	<5	----	----
EK040T: Fluoride Total								
Fluoride	16984-48-8	100	mg/kg	150	130	190	----	----
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	9.7	9.2	9.5	----	----
After HCl pH	----	0.1	pH Unit	1.4	1.4	1.4	----	----
Extraction Fluid pH	----	0.1	pH Unit	5.0	5.0	5.0	----	----
Final pH	----	0.1	pH Unit	5.0	5.0	5.0	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	----	----	----	10.1	10.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220406_13_51_SS_Primary_ALS	SX_OB_20220406_13_52_SS_Primary_ALS	SX_OB_20220406_13_53_SS_Duplicate_ALS	SX_OB_20220406_13_42_SS_Triplicate_ALS	SX_OB_20220406_13_44_SS_Primary_ALS
Sampling date / time				06-Apr-2022 13:51	06-Apr-2022 13:52	06-Apr-2022 13:53	06-Apr-2022 13:42	06-Apr-2022 13:44
Compound	CAS Number	LOR	Unit	EM2206218-006	EM2206218-007	EM2206218-008	EM2206218-011	EM2206218-012
				Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Sum of monocyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
EP074H: Naphthalene								
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	----	----
EP074I: Volatile Halogenated Compounds								
Vinyl chloride	75-01-4	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1,1-Dichloroethene	75-35-4	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
Methylene chloride	75-09-2	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
trans-1,2-Dichloroethene	156-60-5	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
cis-1,2-Dichloroethene	156-59-2	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
Chloroform	67-66-3	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1,1,1-Trichloroethane	71-55-6	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
Carbon Tetrachloride	56-23-5	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1,2-Dichloroethane	107-06-2	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
Trichloroethene	79-01-6	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1,1,2-Trichloroethane	79-00-5	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
Tetrachloroethene	127-18-4	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1,1,1,2-Tetrachloroethane	630-20-6	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1,1,2,2-Tetrachloroethane	79-34-5	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
Hexachlorobutadiene	87-68-3	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
Chlorobenzene	108-90-7	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1,4-Dichlorobenzene	106-46-7	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1,2-Dichlorobenzene	95-50-1	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
1,2,4-Trichlorobenzene	120-82-1	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
^ Sum of volatile chlorinated hydrocarbons	----	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
^ Sum of other chlorinated hydrocarbons	----	0.50	mg/kg	<0.50	<0.50	<0.50	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220406_13_51_SS_Primary_ALS	SX_OB_20220406_13_52_SS_Primary_ALS	SX_OB_20220406_13_53_SS_Duplicate_ALS	SX_OB_20220406_13_42_SS_Triplicate_ALS	SX_OB_20220406_13_44_SS_Primary_ALS
Sampling date / time				06-Apr-2022 13:51	06-Apr-2022 13:52	06-Apr-2022 13:53	06-Apr-2022 13:42	06-Apr-2022 13:44
Compound	CAS Number	LOR	Unit	EM2206218-006	EM2206218-007	EM2206218-008	EM2206218-011	EM2206218-012
				Result	Result	Result	Result	Result
EP075A: Phenolic Compounds (Halogenated)								
2-Chlorophenol	95-57-8	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
2,4-Dichlorophenol	120-83-2	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
2,6-Dichlorophenol	87-65-0	0.50	mg/kg	<0.50	<0.50	<0.50	----	----
4-Chloro-3-methylphenol	59-50-7	1.00	mg/kg	<1.00	<1.00	<1.00	----	----
2,4,5-Trichlorophenol	95-95-4	1.00	mg/kg	<1.00	<1.00	<1.00	----	----
2,4,6-Trichlorophenol	88-06-2	1.00	mg/kg	<1.00	<1.00	<1.00	----	----
2,3,5,6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Pentachlorophenol	87-86-5	1.0	mg/kg	<1.0	<1.0	<1.0	----	----
^ Sum of Phenols (halogenated)	----	1.00	mg/kg	<1.00	<1.00	<1.00	----	----
EP075A: Phenolic Compounds (Non-halogenated)								
Phenol	108-95-2	1	mg/kg	<1	<1	<1	----	----
2-Methylphenol	95-48-7	1	mg/kg	<1	<1	<1	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	<1	----	----
2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	<1	----	----
2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	<1	----	----
2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	<5	----	----
4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	<5	----	----
2-Methyl-4,6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	<5	----	----
Dinoseb	88-85-7	20	mg/kg	<20	<20	<20	----	----
2-Cyclohexyl-4,6-Dinitrophenol	131-89-5	20	mg/kg	<20	<20	<20	----	----
^ Sum of Phenols (non-halogenated)	----	20	mg/kg	<20	<20	<20	----	----
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220406_13_51_SS_Primary_ALS	SX_OB_20220406_13_52_SS_Primary_ALS	SX_OB_20220406_13_53_SS_Duplicate_ALS	SX_OB_20220406_13_42_SS_Triplicate_ALS	SX_OB_20220406_13_44_SS_Primary_ALS
Sampling date / time				06-Apr-2022 13:51	06-Apr-2022 13:52	06-Apr-2022 13:53	06-Apr-2022 13:42	06-Apr-2022 13:44
Compound	CAS Number	LOR	Unit	EM2206218-006	EM2206218-007	EM2206218-008	EM2206218-011	EM2206218-012
				Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg	<1.0	<1.0	<1.0	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	0.6	0.6	0.6	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	1.2	1.2	1.2	----	----
EP075I: Organochlorine Pesticides								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
Endosulfan 1	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
4.4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endosulfan 2	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
4.4'-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
4.4'-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Methoxychlor	72-43-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
^ Sum of organochlorine pesticides	----	0.10	mg/kg	<0.10	<0.10	<0.10	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220406_13_51_SS_Primary_ALS	SX_OB_20220406_13_52_SS_Primary_ALS	SX_OB_20220406_13_53_SS_Duplicate_ALS	SX_OB_20220406_13_42_SS_Triplicate_ALS	SX_OB_20220406_13_44_SS_Primary_ALS
Sampling date / time				06-Apr-2022 13:51	06-Apr-2022 13:52	06-Apr-2022 13:53	06-Apr-2022 13:42	06-Apr-2022 13:44
Compound	CAS Number	LOR	Unit	EM2206218-006	EM2206218-007	EM2206218-008	EM2206218-011	EM2206218-012
				Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued								
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.30	mg/kg	<0.30	<0.30	<0.30	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/5 0-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
^ Chlordane	57-74-9	0.10	mg/kg	<0.10	<0.10	<0.10	----	----
^ Sum of other organochlorine pesticides	----	0.03	mg/kg	<0.03	<0.03	<0.03	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	mg/kg	<20	<20	<20	----	----
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	----	----
C6 - C10 Fraction	C6_C10	20	mg/kg	<20	<20	<20	----	----
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	----	----
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	----	----
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	<100	----	----
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	----	----
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	----	----
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	mg/kg	<20	<20	<20	----	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	5.0	µg/kg	<5.0	<5.0	<5.0	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220406_13_51_SS_Primary_ALS	SX_OB_20220406_13_52_SS_Primary_ALS	SX_OB_20220406_13_53_SS_Duplicate_ALS	SX_OB_20220406_13_42_SS_Triplicate_ALS	SX_OB_20220406_13_44_SS_Primary_ALS
Sampling date / time				06-Apr-2022 13:51	06-Apr-2022 13:52	06-Apr-2022 13:53	06-Apr-2022 13:42	06-Apr-2022 13:44
Compound	CAS Number	LOR	Unit	EM2206218-006	EM2206218-007	EM2206218-008	EM2206218-011	EM2206218-012
				Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	5	µg/kg	<5	<5	<5	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorononanoic acid (PFNA)	375-95-1	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	10.0	µg/kg	<10.0	<10.0	<10.0	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	10.0	µg/kg	<10.0	<10.0	<10.0	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids								



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220406_13_51_SS_Primary_ALS	SX_OB_20220406_13_52_SS_Primary_ALS	SX_OB_20220406_13_53_SS_Duplicate_ALS	SX_OB_20220406_13_42_SS_Triplicate_ALS	SX_OB_20220406_13_44_SS_Primary_ALS
Sampling date / time				06-Apr-2022 13:51	06-Apr-2022 13:52	06-Apr-2022 13:53	06-Apr-2022 13:42	06-Apr-2022 13:44
Compound	CAS Number	LOR	Unit	EM2206218-006	EM2206218-007	EM2206218-008	EM2206218-011	EM2206218-012
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	10.0	µg/kg	<10.0	<10.0	<10.0	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
EP231P: PFAS Sums								
Sum of PFAS	----	50.0	µg/kg	<50.0	<50.0	<50.0	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	5.0	µg/kg	<5.0	<5.0	<5.0	----	----
Sum of PFAS (WA DER List)	----	10.0	µg/kg	<10.0	<10.0	<10.0	----	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	118	111	114	----	----
EP074S: VOC Surrogates (Ultra-Trace)								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	80.2	80.8	87.0	----	----
Toluene-D8	2037-26-5	0.1	%	75.9	75.5	79.2	----	----
4-Bromofluorobenzene	460-00-4	0.1	%	76.6	77.3	82.0	----	----
EP075S: Acid Extractable Surrogates (Waste Classification)								
Phenol-d6	13127-88-3	0.025	%	96.8	88.0	91.5	----	----
2-Chlorophenol-D4	93951-73-6	0.025	%	91.4	83.1	86.4	----	----
2,4,6-Tribromophenol	118-79-6	0.025	%	84.9	77.5	80.7	----	----
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)								
Nitrobenzene-D5	4165-60-0	0.025	%	89.1	83.6	83.8	----	----
1,2-Dichlorobenzene-D4	2199-69-1	0.025	%	89.9	81.8	85.2	----	----
2-Fluorobiphenyl	321-60-8	0.025	%	96.7	88.6	92.2	----	----
Anthracene-d10	1719-06-8	0.025	%	92.1	84.4	88.4	----	----
4-Terphenyl-d14	1718-51-0	0.025	%	99.8	96.6	94.4	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	94.6	101	96.2	----	----
13C8-PFOA	----	0.0002	%	106	108	102	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				SX_OB_20220406_13_46_SS_Primary_ALS	SX_OB_20220406_13_47_SS_Primary_ALS	SX_OB_20220406_13_49_SS_Primary_ALS	SX_OB_20220406_13_51_SS_Primary_ALS	SX_OB_20220406_13_52_SS_Primary_ALS
Sampling date / time				06-Apr-2022 13:46	06-Apr-2022 13:47	06-Apr-2022 13:49	06-Apr-2022 13:51	06-Apr-2022 13:52
Compound	CAS Number	LOR	Unit	EM2206218-013	EM2206218-014	EM2206218-015	EM2206218-016	EM2206218-017
				Result	Result	Result	Result	Result
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	9.9	10.2	10.1	10.1	9.7



Analytical Results

Sub-Matrix: **SOIL**
 (Matrix: **SOIL**)

Sample ID

				SX_OB_20220406_13 _53_SS_Duplicate_AL S	----	----	----	----
				Sampling date / time	06-Apr-2022 13:53	----	----	----
<i>Compound</i>	<i>CAS Number</i>	<i>LOR</i>	<i>Unit</i>	EM2206218-018	-----	-----	-----	-----
				Result	----	----	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	9.7	----	----	----	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID		SX_OB_20220406_14_00_SR_Rinsate_ALS	SX_OB_20220406_14_01_SB_Blank_ALS	----	----	----
Sampling date / time			06-Apr-2022 14:00		06-Apr-2022 14:01		----	----	----
Compound	CAS Number	LOR	Unit	EM2206218-009	EM2206218-010	-----	-----	-----	
				Result	Result	---	---	---	
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	----	----	----	
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	----	----	----	
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	----	----	----	
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	----	----	----	
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	----	----	----	
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	----	----	----	
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	----	----	----	
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	----	----	----	
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	----	----	----	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	----	----	----	



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SX_OB_20220406_14_00_SR_Rinsate_ALS	SX_OB_20220406_14_01_SB_Blank_ALS	----	----	----
Sampling date / time				06-Apr-2022 14:00	06-Apr-2022 14:01	----	----	----	
Compound	CAS Number	LOR	Unit	EM2206218-009	EM2206218-010	-----	-----	-----	
				Result	Result	---	---	---	
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	----	----	----	
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	----	----	----	
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	----	----	----	
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	----	----	----	
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	----	----	----	
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	----	----	----	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	----	----	----	
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	----	----	----	
EP231P: PFAS Sums									
Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	----	----	----	
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	----	----	----	
Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	----	----	----	
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%	94.8	99.1	----	----	----	
13C8-PFOA	----	0.02	%	105	107	----	----	----	



Surrogate Control Limits

Sub-Matrix: ASLP LEACHATE		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP231S: PFAS Surrogate			
13C4-PFOS	----	65	140
13C8-PFOA	----	71	133

Sub-Matrix: DI WATER LEACHATE		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP231S: PFAS Surrogate			
13C4-PFOS	----	65	140
13C8-PFOA	----	71	133

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	41	122
EP074S: VOC Surrogates (Ultra-Trace)			
1,2-Dichloroethane-D4	17060-07-0	59	119
Toluene-D8	2037-26-5	55	117
4-Bromofluorobenzene	460-00-4	59	123
EP075S: Acid Extractable Surrogates (Waste Classification)			
Phenol-d6	13127-88-3	63	134
2-Chlorophenol-D4	93951-73-6	60	125
2,4,6-Tribromophenol	118-79-6	54	129
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)			
Nitrobenzene-D5	4165-60-0	63	131
1,2-Dichlorobenzene-D4	2199-69-1	61	124
2-Fluorobiphenyl	321-60-8	69	131
Anthracene-d10	1719-06-8	70	133
4-Terphenyl-d14	1718-51-0	59	141
EP231S: PFAS Surrogate			
13C4-PFOS	----	68	136
13C8-PFOA	----	69	133

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP231S: PFAS Surrogate			
13C4-PFOS	----	65	140
13C8-PFOA	----	71	133

QUALITY CONTROL REPORT

Work Order	: EM2206218	Page	: 1 of 24
Client	: AGON ENVIRONMENTAL PTY LTD	Laboratory	: Environmental Division Melbourne
Contact	: DAVID LAWSON	Contact	: Josh Alexander
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +61-3-8549 9600
Project	: JC0927	Date Samples Received	: 06-Apr-2022
Order number	:	Date Analysis Commenced	: 06-Apr-2022
C-O-C number	: 20220406153550-ALS-8	Issue Date	: 08-Apr-2022
Sampler	: Will O'Haire		
Site	: 20220406153550-ALS-8		
Quote number	: EN/150/19 -WGTP -Bulk Sample Quote		
No. of samples received	: 18		
No. of samples analysed	: 18		



This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Organics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC



General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key :
 Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
 CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
 LOR = Limit of reporting
 RPD = Relative Percentage Difference
 # = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4272841)									
EM2206218-006	SX_OB_20220406_13_51_ SS_Primary_ALS	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	102	107	4.9	0% - 20%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<5	<5	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	168	156	7.4	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	20	21	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	52	52	0.0	0% - 50%
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<10	<10	0.0	No Limit
EG005T: Zinc	7440-66-6	5	mg/kg	89	87	2.0	0% - 50%		
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	92	87	4.6	0% - 50%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<5	<5	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	170	170	0.0	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	23	27	16.9	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	53	53	0.0	0% - 50%
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<10	<10	0.0	No Limit
EG005T: Zinc	7440-66-6	5	mg/kg	98	92	6.7	0% - 50%		



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)	
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4272197)										
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EA001: pH (CaCl2)	----	0.1	pH Unit	8.2	8.2	0.0	0% - 20%	
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4272235)										
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EA055: Moisture Content	----	0.1	%	26.7	27.2	1.7	0% - 20%	
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4272842)										
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit	
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4272202)										
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<1.0	<1.0	0.0	No Limit	
EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 4272204)										
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<5	<5	0.0	No Limit	
EK040T: Fluoride Total (QC Lot: 4272203)										
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EK040T: Fluoride	16984-48-8	40	mg/kg	120	120	0.0	No Limit	
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4272192)										
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit	
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4272092)										
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit	
		EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
		EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
		EP074-UT: meta- & para-Xylene	108-38-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
			106-42-3							
		EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
	95-47-6	EP074-UT: ortho-Xylene		0.5	mg/kg	<0.5	<0.5	0.0	No Limit	
EP074H: Naphthalene (QC Lot: 4272092)										
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit	
EP074I: Volatile Halogenated Compounds (QC Lot: 4272092)										
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EP074-UT: 1,1-Dichloroethene	75-35-4	0.01	mg/kg	<0.50	<0.50	0.0	No Limit	
		EP074-UT: cis-1,2-Dichloroethene	156-59-2	0.01	mg/kg	<0.50	<0.50	0.0	No Limit	
		EP074-UT: 1,1,1-Trichloroethane	71-55-6	0.01	mg/kg	<0.50	<0.50	0.0	No Limit	
		EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.50	<0.50	0.0	No Limit	
		EP074-UT: 1,1,1,2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.50	<0.50	0.0	No Limit	



Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP074I: Volatile Halogenated Compounds (QC Lot: 4272092) - continued									
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EP074-UT: 1,2,4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: trans-1,2-Dichloroethene	156-60-5	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1,2-Dichloroethane	107-06-2	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1,1,1,2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1,4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1,2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1,1,2-Trichloroethane	79-00-5	0.04	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.5	<0.5	0.0	No Limit
EP075A: Phenolic Compounds (Halogenated) (QC Lot: 4272190)									
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.50	<0.50	0.0	No Limit
		EP075-EM: 2,4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.50	<0.50	0.0	No Limit
		EP075-EM: 2,6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.50	<0.50	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<1.00	<1.00	0.0	No Limit
		EP075-EM: 2,3,5,6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2,4,5-Trichlorophenol	95-95-4	0.05	mg/kg	<1.00	<1.00	0.0	No Limit
		EP075-EM: 2,4,6-Trichlorophenol	88-06-2	0.05	mg/kg	<1.00	<1.00	0.0	No Limit
		EP075-EM: 2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4901-51-3/58-9 0-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<1.0	<1.0	0.0	No Limit
EP075A: Phenolic Compounds (Non-halogenated) (QC Lot: 4272190)									
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Methyl-4,6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<20	<20	0.0	No Limit
		EP075-EM: 2-Cyclohexyl-4,6-Dinitrophenol	131-89-5	5	mg/kg	<20	<20	0.0	No Limit
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4272190)									



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4272190) - continued									
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EP075I: Organochlorine Pesticides (QC Lot: 4272190)									
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4,4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4,4'-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4,4'-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4272092)									



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4272092) - continued									
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<20	<20	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4272191)									
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4272092)									
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<20	<20	0.0	No Limit
		EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4272191)									
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4272914)									
EM2205156-029	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EM2206218-005	SX_OB_20220406_13_49_ SS_Primary_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4272914)									
EM2205156-029	Anonymous	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit



Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4272914) - continued									
EM2205156-029	Anonymous	EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EM2206218-005	SX_OB_20220406_13_49_ SS_Primary_ALS	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<5 µg/kg	<0.005	0.0	No Limit		
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4272914)									
EM2205156-029	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EM2206218-005	SX_OB_20220406_13_49_ SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit



Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4272914) - continued									
EM2206218-005	SX_OB_20220406_13_49_ SS_Primary_ALS	EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4272914)									
EM2205156-029	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EM2206218-005	SX_OB_20220406_13_49_ SS_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4272914)									
EM2205156-029	Anonymous	EP231X: Sum of PFAS	----	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EM2206218-005	SX_OB_20220406_13_49_ SS_Primary_ALS	EP231X: Sum of PFAS	----	0.0002	mg/kg	<50.0 µg/kg	<0.0500	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4275386)									
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit



Sub-Matrix: WATER				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4275386) - continued									
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4275388)									
EM2206218-015	SX_OB_20220406_13_49_ SS_Primary_ALS	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4275386)									
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit		
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4275388)									
EM2206218-015	SX_OB_20220406_13_49_ SS_Primary_ALS	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit		
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4275386)									
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit



Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4275386) - continued									
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4275388)									
EM2206218-015	SX_OB_20220406_13_49_ SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4275386)									
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4275388)									
EM2206218-015	SX_OB_20220406_13_49_ SS_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit



Sub-Matrix: WATER				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4275388) - continued									
EM2206218-015	SX_OB_20220406_13_49_ SS_Primary_ALS	EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4275386)									
EM2206218-001	SX_OB_20220406_13_42_ SS_Triplicate_ALS	EP231X: Sum of PFAS	----	0.01	µg/L	<0.10	<0.10	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.05	<0.05	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4275388)									
EM2206218-015	SX_OB_20220406_13_49_ SS_Primary_ALS	EP231X: Sum of PFAS	----	0.01	µg/L	<0.10	<0.10	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.05	<0.05	0.0	No Limit



Method Blank (MB) and Laboratory Control Sample (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report				
				Result	Spike Concentration	Spike Recovery (%)		Acceptable Limits (%)	
						LCS	Low	High	
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4272841)									
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	123 mg/kg	104	70.0	130	
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1.23 mg/kg	63.2	50.0	130	
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	107	70.0	130	
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.9 mg/kg	93.4	70.0	130	
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.4 mg/kg	95.7	70.0	130	
EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	2.19 mg/kg	83.7	70.0	130	
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	99.7	70.0	130	
EG005T: Selenium	7782-49-2	5	mg/kg	<5	----	----	----	----	
EG005T: Silver	7440-22-4	2	mg/kg	<2	2.9 mg/kg	88.2	70.0	130	
EG005T: Tin	7440-31-5	5	mg/kg	<5	5.33 mg/kg	98.2	70.0	130	
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	82.1	70.0	130	
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel) (QCLot: 4273364)									
EN60-DIa-P: Final pH	----	0.1	pH Unit	7.2	----	----	----	----	
EA001: pH in soil using 0.01M CaCl extract (QCLot: 4272197)									
EA001: pH (CaCl2)	----	----	pH Unit	----	4 pH Unit	101	98.8	101	
					7 pH Unit	100	99.3	101	
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4272842)									
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	93.0	70.0	130	
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4272202)									
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	79.4	70.0	130	
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4272204)									
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	90.1	70.0	130	
EK040T: Fluoride Total (QCLot: 4272203)									
EK040T: Fluoride	16984-48-8	40	mg/kg	<40	400 mg/kg	88.3	75.2	110	
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4272192)									
EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	121	67.4	136	
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4272092)									
EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	2.1 mg/kg	92.1	69.2	116	
EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	2.1 mg/kg	87.9	67.7	116	
EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2.1 mg/kg	86.1	66.6	115	
EP074-UT: meta- & para-Xylene	108-38-3	0.5	mg/kg	<0.5	4.2 mg/kg	87.5	65.2	112	
	106-42-3								
EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	2.1 mg/kg	88.6	69.4	111	



Sub-Matrix: SOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
				Result	Spike	Spike Recovery (%)	Acceptable Limits (%)	
					Concentration	LCS	Low	High
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4272092) - continued								
EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2.1 mg/kg	89.7	68.4	110
EP074H: Naphthalene (QCLot: 4272092)								
EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	0.6 mg/kg	90.6	72.3	114
EP074I: Volatile Halogenated Compounds (QCLot: 4272092)								
EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	0.1 mg/kg	92.3	47.0	138
EP074-UT: 1,1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	0.1 mg/kg	90.9	57.6	125
EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.4	2.1 mg/kg	88.9	72.3	115
EP074-UT: trans-1,2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	0.1 mg/kg	91.0	60.5	122
EP074-UT: cis-1,2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	0.1 mg/kg	92.4	70.3	112
EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.02	0.1 mg/kg	91.0	66.6	115
EP074-UT: 1,1,1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	0.1 mg/kg	90.8	64.4	122
EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	0.1 mg/kg	87.1	58.4	127
EP074-UT: 1,2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	0.1 mg/kg	103	72.9	114
EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.02	0.1 mg/kg	89.7	64.7	115
EP074-UT: 1,1,2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	0.1 mg/kg	97.6	72.6	116
EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	0.1 mg/kg	88.4	60.0	119
EP074-UT: 1,1,1,2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	0.1 mg/kg	89.4	71.8	116
EP074-UT: 1,1,1,2,2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	0.1 mg/kg	96.0	66.1	116
EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	0.1 mg/kg	87.6	39.8	128
EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	0.1 mg/kg	89.4	70.3	113
EP074-UT: 1,4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	0.1 mg/kg	86.0	62.6	113
EP074-UT: 1,2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	0.1 mg/kg	89.3	70.8	110
EP074-UT: 1,2,4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	0.1 mg/kg	83.0	48.4	120
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4272190)								
EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	2 mg/kg	90.5	74.5	126
EP075-EM: 2,4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	2 mg/kg	88.3	72.7	126
EP075-EM: 2,6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	2 mg/kg	88.4	73.5	132
EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	2 mg/kg	88.4	72.8	128
EP075-EM: 2,4,5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	2 mg/kg	89.7	73.3	134
EP075-EM: 2,4,6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	2 mg/kg	88.2	72.4	128
EP075-EM: 2,3,5,6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	2 mg/kg	87.8	69.4	126
EP075-EM: 2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4901-51-3/5	0.05	mg/kg	<0.05	4 mg/kg	87.6	71.9	128
	8-90-2							
EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	4 mg/kg	78.0	54.4	135
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4272190)								
EP075-EM: Phenol	108-95-2	1	mg/kg	<1	2 mg/kg	92.2	71.5	130
EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	2 mg/kg	85.8	73.4	129
EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	4 mg/kg	86.5	74.3	129



Sub-Matrix: SOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report				
				Result	Spike Concentration	Spike Recovery (%)		Acceptable Limits (%)	
						LCS	Low	High	
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4272190) - continued									
EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	2 mg/kg	84.8	70.9	133	
EP075-EM: 2,4-Dimethylphenol	105-67-9	1	mg/kg	<1	2 mg/kg	87.9	71.8	132	
EP075-EM: 2,4-Dinitrophenol	51-28-5	5	mg/kg	<5	10 mg/kg	81.6	41.0	156	
EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	10 mg/kg	90.9	65.3	134	
EP075-EM: 2-Methyl-4,6-dinitrophenol	8071-51-0	5	mg/kg	<5	10 mg/kg	83.2	43.6	128	
EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	10 mg/kg	83.2	62.0	128	
EP075-EM: 2-Cyclohexyl-4,6-Dinitrophenol	131-89-5	5	mg/kg	<5	10 mg/kg	76.2	34.5	137	
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4272190)									
EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2 mg/kg	91.8	73.0	131	
EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2 mg/kg	91.4	76.3	130	
EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2 mg/kg	90.0	72.0	135	
EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	2 mg/kg	92.8	74.4	131	
EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	2 mg/kg	91.7	73.3	130	
EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	2 mg/kg	89.9	78.4	127	
EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	2 mg/kg	90.5	75.3	132	
EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	2 mg/kg	91.5	75.4	130	
EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	2 mg/kg	92.5	69.6	133	
EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	2 mg/kg	95.3	75.0	133	
EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	4 mg/kg	95.9	75.8	133	
EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	2 mg/kg	95.1	65.1	130	
EP075-EM: Indeno(1,2,3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	2 mg/kg	97.3	72.1	134	
EP075-EM: Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	2 mg/kg	97.4	72.9	135	
EP075-EM: Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	2 mg/kg	97.5	71.3	134	
EP075I: Organochlorine Pesticides (QCLot: 4272190)									
EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	2 mg/kg	88.7	71.0	129	
EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	2 mg/kg	89.1	74.8	126	
EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	2 mg/kg	85.2	75.7	130	
EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	2 mg/kg	90.7	70.8	130	
EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	2 mg/kg	92.0	76.5	134	
EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	2 mg/kg	88.2	75.5	131	
EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	2 mg/kg	88.3	76.8	130	
EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	2 mg/kg	88.0	73.6	130	
EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	2 mg/kg	88.2	75.0	133	
EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	2 mg/kg	88.8	75.3	131	
EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	2 mg/kg	90.0	69.4	134	
EP075-EM: 4,4'-DDE	72-55-9	0.05	mg/kg	<0.05	2 mg/kg	94.2	71.0	132	
EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	2 mg/kg	92.0	78.0	133	
EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	2 mg/kg	88.0	69.0	143	



Sub-Matrix: SOIL

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report				
				Result	Spike Concentration	Spike Recovery (%)		Acceptable Limits (%)	
						LCS	Low	High	
EP075I: Organochlorine Pesticides (QCLot: 4272190) - continued									
EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	2 mg/kg	84.8	55.7	145	
EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	2 mg/kg	93.6	71.4	135	
EP075-EM: 4,4'-DDD	72-54-8	0.05	mg/kg	<0.05	2 mg/kg	88.2	74.8	134	
EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	2 mg/kg	91.5	70.2	135	
EP075-EM: 4,4'-DDT	50-29-3	0.05	mg/kg	<0.05	2 mg/kg	89.4	77.7	133	
EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	2 mg/kg	90.0	63.6	135	
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4272092)									
EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<10	39.6 mg/kg	88.7	61.1	119	
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4272191)									
EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	700 mg/kg	82.2	74.4	129	
EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	2930 mg/kg	98.8	81.0	123	
EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	1380 mg/kg	101	81.8	121	
EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	5010 mg/kg	97.4	70.0	130	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4272092)									
EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	48.9 mg/kg	86.9	59.9	119	
EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	----	----	----	----	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4272191)									
EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	1030 mg/kg	92.5	75.4	132	
EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	3680 mg/kg	101	80.8	120	
EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	270 mg/kg	78.6	73.3	136	
EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	4980 mg/kg	97.8	70.0	130	
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4272914)									
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00111 mg/kg	98.0	72.0	128	
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00118 mg/kg	100	73.0	123	
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.0014 mg/kg	78.4	67.0	130	
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00119 mg/kg	110	70.0	132	
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00116 mg/kg	96.8	68.0	136	
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00121 mg/kg	105	59.0	134	
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4272914)									
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	95.8	71.0	135	
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	100	69.0	132	
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	96.8	70.0	132	
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	96.2	71.0	131	
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	104	69.0	133	
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	99.7	72.0	129	
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	101	69.0	133	
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	88.8	64.0	136	



Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report Result	Laboratory Control Spike (LCS) Report				
					Spike Concentration	Spike Recovery (%)		Acceptable Limits (%)	
						LCS	Low	High	
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4272914) - continued									
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	94.8	69.0	135	
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	89.8	66.0	139	
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	78.5	69.0	133	
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4272914)									
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	110	67.0	137	
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	107	70.0	130	
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	106	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	98.6	70.0	130	
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	106	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	104	63.0	144	
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	112	61.0	139	
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4272914)									
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00117 mg/kg	95.2	62.0	145	
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00119 mg/kg	106	64.0	140	
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.0012 mg/kg	112	65.0	137	
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00121 mg/kg	122	70.0	130	
EP231P: PFAS Sums (QCLot: 4272914)									
EP231X: Sum of PFAS	----	0.0002	mg/kg	<0.0002	----	----	----	----	
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.0002	mg/kg	<0.0002	----	----	----	----	
EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	----	----	----	----	

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report Result	Laboratory Control Spike (LCS) Report				
					Spike Concentration	Spike Recovery (%)		Acceptable Limits (%)	
						LCS	Low	High	
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4274236)									
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	103	72.0	130	
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	101	71.0	127	
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	105	68.0	131	
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	105	69.0	134	
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	109	65.0	140	
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	110	53.0	142	
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4275386)									
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	104	72.0	130	
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	99.0	71.0	127	



Sub-Matrix: WATER

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report Result	Laboratory Control Spike (LCS) Report				
					Spike Concentration	Spike Recovery (%)		Acceptable Limits (%)	
						LCS	Low	High	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4275386) - continued									
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	96.9	68.0	131	
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	99.6	69.0	134	
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	92.1	65.0	140	
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	97.6	53.0	142	
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4275388)									
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	92.6	72.0	130	
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	99.4	71.0	127	
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	98.2	68.0	131	
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	98.2	69.0	134	
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	94.8	65.0	140	
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	99.6	53.0	142	
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4274236)									
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	100	73.0	129	
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	107	72.0	129	
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	99.2	72.0	129	
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	104	72.0	130	
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	104	71.0	133	
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	102	69.0	130	
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	100	71.0	129	
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	96.7	69.0	133	
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	107	72.0	134	
EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	114	65.0	144	
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	101	71.0	132	
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4275386)									
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	96.1	73.0	129	
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	98.4	72.0	129	
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	99.6	72.0	129	
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	95.1	72.0	130	
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	96.3	71.0	133	
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	96.1	69.0	130	
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	105	71.0	129	
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	88.4	69.0	133	
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	98.1	72.0	134	
EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	95.0	65.0	144	
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	111	71.0	132	
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4275388)									
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	94.6	73.0	129	
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	94.6	72.0	129	



Sub-Matrix: WATER

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report				
				Result	Spike	Spike Recovery (%)		Acceptable Limits (%)	
					Concentration	LCS	Low	High	
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4275388) - continued									
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	97.8	72.0	129	
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	97.4	72.0	130	
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	99.9	71.0	133	
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	95.6	69.0	130	
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	103	71.0	129	
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	95.9	69.0	133	
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	99.9	72.0	134	
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	93.2	65.0	144	
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	107	71.0	132	
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4274236)									
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	113	67.0	137	
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	110	68.0	141	
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	120	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	102	70.0	130	
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	113	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	122	65.0	136	
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	121	61.0	135	
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4275386)									
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	97.4	67.0	137	
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	102	68.0	141	
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	104	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	95.0	70.0	130	
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	100	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	100	65.0	136	
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	95.6	61.0	135	
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4275388)									
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	102	67.0	137	
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	137	68.0	141	
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	107	70.0	130	
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	101	70.0	130	



Sub-Matrix: WATER

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report Result	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%)	Acceptable Limits (%)	
						LCS	Low	High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4275388) - continued								
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	102	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	95.4	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	98.3	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4274236)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	101	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	110	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	118	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.242 µg/L	113	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4275386)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	97.0	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	110	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	109	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.242 µg/L	90.6	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4275388)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	97.6	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	106	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	105	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.242 µg/L	74.1	70.0	130
EP231P: PFAS Sums (QCLot: 4274236)								
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----
EP231P: PFAS Sums (QCLot: 4275386)								
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----
EP231P: PFAS Sums (QCLot: 4275388)								
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----



Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4272841)							
EM2206218-002	SX_OB_20220406_13_44_SS_Primary_ALS	EG005T: Arsenic	7440-38-2	50 mg/kg	78.8	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	90.9	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	102	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	94.0	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	91.2	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	96.9	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	86.2	80.0	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4272842)							
EM2206218-002	SX_OB_20220406_13_44_SS_Primary_ALS	EG035T: Mercury	7439-97-6	0.5 mg/kg	96.0	76.0	116
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4272202)							
EM2206218-002	SX_OB_20220406_13_44_SS_Primary_ALS	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	85.7	58.0	114
EM2206218-002	SX_OB_20220406_13_44_SS_Primary_ALS	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	97.9	58.0	114
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4272204)							
EM2206218-002	SX_OB_20220406_13_44_SS_Primary_ALS	EK026SF: Total Cyanide	57-12-5	20 mg/kg	91.9	70.0	130
EK040T: Fluoride Total (QCLot: 4272203)							
EM2206218-002	SX_OB_20220406_13_44_SS_Primary_ALS	EK040T: Fluoride	16984-48-8	400 mg/kg	88.7	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4272192)							
EM2206218-002	SX_OB_20220406_13_44_SS_Primary_ALS	EP066-EM: Total Polychlorinated biphenyls	----	1 mg/kg	124	59.6	152
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4272092)							
EM2206218-002	SX_OB_20220406_13_44_SS_Primary_ALS	EP074-UT: Benzene	71-43-2	2 mg/kg	88.7	53.7	130
		EP074-UT: Toluene	108-88-3	2 mg/kg	85.5	55.1	124
EP074I: Volatile Halogenated Compounds (QCLot: 4272092)							
EM2206218-002	SX_OB_20220406_13_44_SS_Primary_ALS	EP074-UT: 1,1-Dichloroethene	75-35-4	2 mg/kg	87.4	38.4	145
		EP074-UT: Trichloroethene	79-01-6	2 mg/kg	84.3	48.1	128
		EP074-UT: Chlorobenzene	108-90-7	2 mg/kg	81.2	55.5	122
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4272190)							
EM2206218-002	SX_OB_20220406_13_44_SS_Primary_ALS	EP075-EM: 2-Chlorophenol	95-57-8	3 mg/kg	86.7	44.0	143
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	3 mg/kg	86.9	41.5	139
		EP075-EM: Pentachlorophenol	87-86-5	3 mg/kg	68.0	10.0	144
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4272190)							
EM2206218-002	SX_OB_20220406_13_44_SS_Primary_ALS	EP075-EM: Phenol	108-95-2	3 mg/kg	87.6	44.2	134
		EP075-EM: 2-Nitrophenol	88-75-5	3 mg/kg	80.9	34.2	129



Sub-Matrix: SOIL

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4272190)							
EM2206218-002	SX_OB_20220406_13_44_SS_Primary_ALS	EP075-EM: Acenaphthene	83-32-9	3 mg/kg	81.6	42.6	138
		EP075-EM: Pyrene	129-00-0	3 mg/kg	85.2	37.8	152
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4272092)							
EM2206218-002	SX_OB_20220406_13_44_SS_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	28 mg/kg	70.5	42.3	111
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4272191)							
EM2206218-003	SX_OB_20220406_13_46_SS_Primary_ALS	EP071-EM: C10 - C14 Fraction	----	700 mg/kg	75.8	71.3	126
		EP071-EM: C15 - C28 Fraction	----	2930 mg/kg	90.4	75.1	123
		EP071-EM: C29 - C36 Fraction	----	1380 mg/kg	92.6	78.1	120
		EP071-EM: C10 - C36 Fraction (sum)	----	5010 mg/kg	89.2	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4272092)							
EM2206218-002	SX_OB_20220406_13_44_SS_Primary_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	33 mg/kg	68.8	39.9	109
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4272191)							
EM2206218-003	SX_OB_20220406_13_46_SS_Primary_ALS	EP071-EM: >C10 - C16 Fraction	----	1030 mg/kg	85.0	71.5	130
		EP071-EM: >C16 - C34 Fraction	----	3680 mg/kg	92.1	76.9	119
		EP071-EM: >C34 - C40 Fraction	----	270 mg/kg	73.0	65.3	139
		EP071-EM: >C10 - C40 Fraction (sum)	----	4980 mg/kg	90.0	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4272914)							
EM2205156-031	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00111 mg/kg	105	72.0	128
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00118 mg/kg	90.2	73.0	123
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00114 mg/kg	102	67.0	130
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00119 mg/kg	112	70.0	132
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00116 mg/kg	105	68.0	136
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00121 mg/kg	110	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4272914)							
EM2205156-031	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	92.0	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	91.3	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	99.6	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	101	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	101	69.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	95.7	72.0	129
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	92.1	69.0	133
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	84.3	64.0	136
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	91.6	69.0	135
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	92.4	66.0	139
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	80.0	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4272914)							
EM2205156-031	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	107	67.0	137



Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike Concentration	SpikeRecovery(%) MS	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4272914) - continued							
EM2205156-031	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	86.9	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	89.1	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	95.2	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	107	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	119	63.0	144
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	103	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4272914)							
EM2205156-031	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00117 mg/kg	89.0	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00119 mg/kg	108	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0012 mg/kg	119	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00121 mg/kg	113	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike Concentration	SpikeRecovery(%) MS	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4275386)							
EM2206218-004	SX_OB_20220406_13_47_SS_Primary_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	97.0	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	93.3	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	92.2	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	104	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	99.1	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	112	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4275388)							
EM2206218-012	SX_OB_20220406_13_44_SS_Primary_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	110	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	97.2	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	98.2	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	101	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	91.8	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	94.7	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4275386)							
EM2206218-004	SX_OB_20220406_13_47_SS_Primary_ALS	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	77.0	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	98.6	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	96.1	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	97.4	72.0	130



Sub-Matrix: WATER

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4275386) - continued							
EM2206218-004	SX_OB_20220406_13_47_SS_Primary_ALS	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	97.0	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	99.4	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	100.0	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	91.6	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	102	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	96.9	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	109	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4275388)							
EM2206218-012	SX_OB_20220406_13_44_SS_Primary_ALS	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	95.8	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	100	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	95.3	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	97.1	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	97.2	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	96.1	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	102	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	92.1	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	99.8	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	91.2	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	107	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4275386)							
EM2206218-004	SX_OB_20220406_13_47_SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	99.2	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	119	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	107	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	94.7	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	95.5	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	101	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	106	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4275388)							
EM2206218-012	SX_OB_20220406_13_44_SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	96.1	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	119	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	104	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	99.2	70.0	130



Sub-Matrix: WATER

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4275388) - continued							
EM2206218-012	SX_OB_20220406_13_44_SS_Primary_ALS	EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	93.5	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	102	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	106	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4275386)							
EM2206218-004	SX_OB_20220406_13_47_SS_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	94.3	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	108	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	108	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	75.1	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4275388)							
EM2206218-012	SX_OB_20220406_13_44_SS_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	96.1	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	103	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	108	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	88.3	70.0	130

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: EM2206218	Page	: 1 of 12
Client	: AGON ENVIRONMENTAL PTY LTD	Laboratory	: Environmental Division Melbourne
Contact	: DAVID LAWSON	Telephone	: +61-3-8549 9600
Project	: JC0927	Date Samples Received	: 06-Apr-2022
Site	: 20220406153550-ALS-8	Issue Date	: 08-Apr-2022
Sampler	: Will O'Haire	No. of samples received	: 18
Order number	:	No. of samples analysed	: 18

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**



Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for **VOC in soils** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EA001: pH in soil using 0.01M CaCl extract								
Soil Glass Jar - Unpreserved (EA001) SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	07-Apr-2022	13-Apr-2022	✓	07-Apr-2022	07-Apr-2022	✓
EA055: Moisture Content (Dried @ 105-110°C)								
Soil Glass Jar - Unpreserved (EA055) SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	----	----	----	06-Apr-2022	20-Apr-2022	✓
EG005(ED093)T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved (EG005T) SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	07-Apr-2022	03-Oct-2022	✓	07-Apr-2022	03-Oct-2022	✓
EG035T: Total Recoverable Mercury by FIMS								
Soil Glass Jar - Unpreserved (EG035T) SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	07-Apr-2022	04-May-2022	✓	08-Apr-2022	04-May-2022	✓
EG048: Hexavalent Chromium (Alkaline Digest)								
Soil Glass Jar - Unpreserved (EG048G) SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	06-Apr-2022	04-May-2022	✓	07-Apr-2022	13-Apr-2022	✓



Matrix: SOIL

Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EK026SF: Total CN by Segmented Flow Analyser								
Soil Glass Jar - Unpreserved (EK026SF)								
SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	06-Apr-2022	20-Apr-2022	✓	07-Apr-2022	20-Apr-2022	✓
EK040T: Fluoride Total								
Soil Glass Jar - Unpreserved (EK040T)								
SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	06-Apr-2022	04-May-2022	✓	08-Apr-2022	04-May-2022	✓
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P)								
SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	07-Apr-2022	03-Oct-2022	✓	----	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P)								
SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	07-Apr-2022	03-Oct-2022	✓	----	----	----
EP066: Polychlorinated Biphenyls (PCB)								
Soil Glass Jar - Unpreserved (EP066-EM)								
SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	06-Apr-2022	20-Apr-2022	✓	07-Apr-2022	16-May-2022	✓
EP074A: Monocyclic Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved (EP074-UT)								
SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	06-Apr-2022	13-Apr-2022	✓	06-Apr-2022	13-Apr-2022	✓
EP074H: Naphthalene								
Soil Glass Jar - Unpreserved (EP074-UT)								
SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	06-Apr-2022	13-Apr-2022	✓	06-Apr-2022	13-Apr-2022	✓



Matrix: SOIL

Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EP074I: Volatile Halogenated Compounds								
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	06-Apr-2022	13-Apr-2022	✓	06-Apr-2022	13-Apr-2022	✓
EP075A: Phenolic Compounds (Halogenated)								
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	06-Apr-2022	20-Apr-2022	✓	07-Apr-2022	16-May-2022	✓
EP075A: Phenolic Compounds (Non-halogenated)								
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	06-Apr-2022	20-Apr-2022	✓	07-Apr-2022	16-May-2022	✓
EP075B: Polynuclear Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	06-Apr-2022	20-Apr-2022	✓	07-Apr-2022	16-May-2022	✓
EP075I: Organochlorine Pesticides								
Soil Glass Jar - Unpreserved (EP075-EM) SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	06-Apr-2022	20-Apr-2022	✓	07-Apr-2022	16-May-2022	✓
EP080/071: Total Petroleum Hydrocarbons								
Soil Glass Jar - Unpreserved (EP074-UT) SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	06-Apr-2022	13-Apr-2022	✓	06-Apr-2022	13-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM) SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	06-Apr-2022	20-Apr-2022	✓	07-Apr-2022	16-May-2022	✓



Matrix: **SOIL**

Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
Soil Glass Jar - Unpreserved (EP074-UT)								
SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	06-Apr-2022	13-Apr-2022	✓	06-Apr-2022	13-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM)								
SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	06-Apr-2022	20-Apr-2022	✓	07-Apr-2022	16-May-2022	✓
EP231A: Perfluoroalkyl Sulfonic Acids								
HDPE Soil Jar (EP231X)								
SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	07-Apr-2022	03-Oct-2022	✓	07-Apr-2022	17-May-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids								
HDPE Soil Jar (EP231X)								
SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	07-Apr-2022	03-Oct-2022	✓	07-Apr-2022	17-May-2022	✓
EP231C: Perfluoroalkyl Sulfonamides								
HDPE Soil Jar (EP231X)								
SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	07-Apr-2022	03-Oct-2022	✓	07-Apr-2022	17-May-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
HDPE Soil Jar (EP231X)								
SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	07-Apr-2022	03-Oct-2022	✓	07-Apr-2022	17-May-2022	✓
EP231P: PFAS Sums								
HDPE Soil Jar (EP231X)								
SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	06-Apr-2022	07-Apr-2022	03-Oct-2022	✓	07-Apr-2022	17-May-2022	✓

Matrix: **WATER**

Evaluation: * = Holding time breach ; ✓ = Within holding time.



Matrix: **WATER** Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis				
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation		
EP231A: Perfluoroalkyl Sulfonic Acids									
HDPE (no PTFE) (EP231X) SX_OB_20220406_14_00_SR_Rinsate_ALS,	SX_OB_20220406_14_01_SB_Blank_ALS	06-Apr-2022	07-Apr-2022	03-Oct-2022	✓	07-Apr-2022	03-Oct-2022	✓	
HDPE (no PTFE) (EP231X) SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS, SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS, SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	07-Apr-2022	08-Apr-2022	04-Oct-2022	✓	08-Apr-2022	04-Oct-2022	✓	
EP231B: Perfluoroalkyl Carboxylic Acids									
HDPE (no PTFE) (EP231X) SX_OB_20220406_14_00_SR_Rinsate_ALS,	SX_OB_20220406_14_01_SB_Blank_ALS	06-Apr-2022	07-Apr-2022	03-Oct-2022	✓	07-Apr-2022	03-Oct-2022	✓	
HDPE (no PTFE) (EP231X) SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS, SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS, SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	07-Apr-2022	08-Apr-2022	04-Oct-2022	✓	08-Apr-2022	04-Oct-2022	✓	
EP231C: Perfluoroalkyl Sulfonamides									
HDPE (no PTFE) (EP231X) SX_OB_20220406_14_00_SR_Rinsate_ALS,	SX_OB_20220406_14_01_SB_Blank_ALS	06-Apr-2022	07-Apr-2022	03-Oct-2022	✓	07-Apr-2022	03-Oct-2022	✓	
HDPE (no PTFE) (EP231X) SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS, SX_OB_20220406_13_42_SS_Triplicate_ALS, SX_OB_20220406_13_46_SS_Primary_ALS, SX_OB_20220406_13_49_SS_Primary_ALS, SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS, SX_OB_20220406_13_44_SS_Primary_ALS, SX_OB_20220406_13_47_SS_Primary_ALS, SX_OB_20220406_13_51_SS_Primary_ALS, SX_OB_20220406_13_53_SS_Duplicate_ALS	07-Apr-2022	08-Apr-2022	04-Oct-2022	✓	08-Apr-2022	04-Oct-2022	✓	



Matrix: **WATER** Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis			
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
HDPE (no PTFE) (EP231X)								
SX_OB_20220406_14_00_SR_Rinsate_ALS,	SX_OB_20220406_14_01_SB_Blank_ALS	06-Apr-2022	07-Apr-2022	03-Oct-2022	✓	07-Apr-2022	03-Oct-2022	✓
HDPE (no PTFE) (EP231X)								
SX_OB_20220406_13_42_SS_Triplicate_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS,	07-Apr-2022	08-Apr-2022	04-Oct-2022	✓	08-Apr-2022	04-Oct-2022	✓
SX_OB_20220406_13_46_SS_Primary_ALS,	SX_OB_20220406_13_47_SS_Primary_ALS,							
SX_OB_20220406_13_49_SS_Primary_ALS,	SX_OB_20220406_13_51_SS_Primary_ALS,							
SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_53_SS_Duplicate_ALS,							
SX_OB_20220406_13_42_SS_Triplicate_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS,							
SX_OB_20220406_13_46_SS_Primary_ALS,	SX_OB_20220406_13_47_SS_Primary_ALS,							
SX_OB_20220406_13_49_SS_Primary_ALS,	SX_OB_20220406_13_51_SS_Primary_ALS,							
SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_53_SS_Duplicate_ALS							
EP231P: PFAS Sums								
HDPE (no PTFE) (EP231X)								
SX_OB_20220406_14_00_SR_Rinsate_ALS,	SX_OB_20220406_14_01_SB_Blank_ALS	06-Apr-2022	07-Apr-2022	03-Oct-2022	✓	07-Apr-2022	03-Oct-2022	✓
HDPE (no PTFE) (EP231X)								
SX_OB_20220406_13_42_SS_Triplicate_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS,	07-Apr-2022	08-Apr-2022	04-Oct-2022	✓	08-Apr-2022	04-Oct-2022	✓
SX_OB_20220406_13_46_SS_Primary_ALS,	SX_OB_20220406_13_47_SS_Primary_ALS,							
SX_OB_20220406_13_49_SS_Primary_ALS,	SX_OB_20220406_13_51_SS_Primary_ALS,							
SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_53_SS_Duplicate_ALS,							
SX_OB_20220406_13_42_SS_Triplicate_ALS,	SX_OB_20220406_13_44_SS_Primary_ALS,							
SX_OB_20220406_13_46_SS_Primary_ALS,	SX_OB_20220406_13_47_SS_Primary_ALS,							
SX_OB_20220406_13_49_SS_Primary_ALS,	SX_OB_20220406_13_51_SS_Primary_ALS,							
SX_OB_20220406_13_52_SS_Primary_ALS,	SX_OB_20220406_13_53_SS_Duplicate_ALS							



Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: * = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type	Method	Count		Rate (%)			Quality Control Specification
		QC	Reaular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	1	8	12.50	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	1	8	12.50	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	8	12.50	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	14	14.29	10.00	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	1	8	12.50	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	8	12.50	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	8	12.50	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	8	12.50	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	8	12.50	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	12	16.67	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	8	12.50	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	12.50	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	8	25.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	14	7.14	5.00	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	2	8	25.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	12	8.33	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	14	7.14	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	12	8.33	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard



Matrix: **SOIL**

Evaluation: * = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type	Method	Count		Rate (%)			Quality Control Specification
		QC	Reaular	Actual	Expected	Evaluation	
Analytical Methods							
Matrix Spikes (MS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	8	25.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	14	7.14	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	12	8.33	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: * = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type	Method	Count		Rate (%)			Quality Control Specification
		QC	Reaular	Actual	Expected	Evaluation	
Analytical Methods							
Laboratory Duplicates (DUP)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	18	11.11	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	3	18	16.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	3	18	16.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	18	11.11	5.00	✓	NEPM 2013 B3 & ALS QC Standard



Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
pH in soil using a 0.01M CaCl ₂ extract	EA001	SOIL	In house: Referenced to Rayment and Lyons 4B3 (mod.) or 4B4 (mod.) 10 g of soil is mixed with 50 mL of 0.01M CaCl ₂ and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl ₂) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl ₂ which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	SOIL	In house: Referenced to USEPA SW846, Method 3060. Hexavalent chromium is extracted by alkaline digestion. The digest is determined by photometrically by automatic discrete analyser, following pH adjustment. The instrument uses colour development using dephenylcarbazide. Each run of samples is measured against a five-point calibration curve. This method is compliant with NEPM Schedule B(3)
Total Cyanide by Segmented Flow Analyser	EK026SF	SOIL	In house: Referenced to APHA 4500-CN C / ASTM D7511 / ISO 14403. Caustic leachates of soil samples are introduced into an automated segmented flow analyser. Complex bound cyanide is decomposed in a continuously flowing stream, at a pH of 3.8, by the effect of UV light. A UV-B lamp (312 nm) and a decomposition spiral of borosilicate glass are used to filter out UV light with a wavelength of less than 290 nm thus preventing the conversion of thiocyanate into cyanide. The hydrogen cyanide present at a pH of 3.8 is separated by gas dialysis. The hydrogen cyanide is then determined photometrically, based on the reaction of cyanide with chloramine-T to form cyanogen chloride. This then reacts with 4-pyridine carboxylic acid and 1,3-dimethylbarbituric acid to give a red colour which is measured at 600 nm. This method is compliant with NEPM Schedule B(3).
Total Fluoride	EK040T	SOIL	(In-house) Total fluoride is determined by ion specific electrode (ISE) in a solution obtained after a Sodium Carbonate / Potassium Carbonate fusion dissolution.
PCB - VIC EPA 448.3 Screen	EP066-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071-EM	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40.
Volatile Organic Compounds - Ultra-trace	EP074-UT	SOIL	In house: Referenced to USEPA SW 846 - 8260 Extracts are analysed by Purge and Trap, Capillary GC/MS in partial SIM/Scan mode. Quantification is by comparison against an established multi-point calibration curves. This method is compliant with NEPM Schedule B(3).



Analytical Methods	Method	Matrix	Method Descriptions
Volatile Organic Compounds - Ultra-trace - Summations	EP074-UT-SUM	SOIL	Summation of MAHs and VHCs
Semivolatile Organic Compounds - Waste Classification	EP075-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
SVOC - Waste Classification (Sums)	EP075-EM-SUM	SOIL	Summations for EP075 (EM variation)
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	SOIL	In-house: Analysis of soils by solvent extraction followed by LC-Electrospray-MS-MS, Negative Mode using MRM using internal standard quantitation. Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to a portion of soil which is then extracted with MTBE and an ion pairing reagent. A portion of extract is exchanged into the analytical solvent mixture, combined with an equal volume reagent water and filtered for analysis. Method procedures and data quality objectives conform to US DoD QSM 5.3, table B-15 requirements.
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	WATER	In-house: Analysis of fresh and saline waters by Solid Phase Extraction (SPE) followed by LC-Electrospray-MS-MS, Negative Mode using MRM and internal standard quantitation. Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures and data quality objectives conform to US DoD QSM 5.3, table B-15 requirements.

Preparation Methods	Method	Matrix	Method Descriptions
NaOH leach for CN in Soils	CN-PR	SOIL	In house: APHA 4500 CN. Samples are extracted by end-over-end tumbling with NaOH.
pH in soil using a 0.01M CaCl ₂ extract	EA001-PR	SOIL	In house: Referenced to Rayment and Lyons 4B1, 10 g of soil is mixed with 50 mL of 0.01M CaCl ₂ and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
Alkaline digestion for Hexavalent Chromium	EG048PR	SOIL	In house: Referenced to USEPA SW846, Method 3060A.
Total Fluoride	EK040T-PR	SOIL	In house: Samples are fused with Sodium Carbonate / Potassium Carbonate flux.
ASLP for Non & Semivolatile Analytes - Plastic Leaching Vessel	EN60a-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates.
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils - Ultra-trace.	ORG16-UT	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids - VIC EPA Screen	ORG17-EM	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na ₂ SO ₄ and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.



<i>Preparation Methods</i>	<i>Method</i>	<i>Matrix</i>	<i>Method Descriptions</i>
QuEChERS Extraction of Solids	ORG71	SOIL	In house: Sequential extractions with Acetonitrile/Methanol by shaking. Extraction efficiency aided by the addition of salts under acidic conditions. Where relevant, interferences from co-extracted organics are removed with dispersive clean-up media (dSPE). The extract is either diluted or concentrated and exchanged into the analytical solvent.
Solid Phase Extraction (SPE) for PFAS in water	ORG72	SOIL	In-house: Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures conform to US DoD QSM 5.3, table B-15 requirements.
Solid Phase Extraction (SPE) for PFAS in water	ORG72	WATER	In-house: Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures conform to US DoD QSM 5.3, table B-15 requirements.